Constructional Meaning and Inheritance in Mandarin Chinese LVCs: The Case of the GIVE Group

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1 Introduction

Light verb constructions (henceforth, LVCs) can be found across many languages. In Section 1.1, I will introduce the basic properties of the construction with examples in Mandarin Chinese. The syntactic alternations of Mandarin LVCs and the different aspectual properties pertinent to each LVC, as revealed in corpus data, will be described in the second part of the section.

1.1 Light Verb Constructions

The term 'light verb' (henceforth, LV), coined by Jespersen (1954), refers to verbs such as *have* and *give* in complex predicate constructions like *have a bath* and *give a push*, where the main semantic content is provided not by the verb, but by the action nominal. In Mandarin Chinese, verbs such as *jinxing* 'carry out' and *jiayi* 'give' are regarded as light verbs (Zhu 1982, 1985), and they can be further categorised into DO and GIVE groups based on their verb sense. The latter GIVE group is the focus of the current paper. Within this group, I choose the three verbs, namely *jiyu* 'give', *yuyi* 'give', and *jiayi* 'give', as the focus in this study, because they have the highest frequencies in the corpus in question: in the one-million-Chinese-word ToRCH 2009 corpus (see Section 1.2 for details), the light verbs *jiyu*, *yuyi* and *jiayi* have 77, 66 and 68 occurrences respectively. Due to this reason, I will regard them as prototype GIVE LVs, following Schmid's (2000) understanding of prototype that is assumed to be the most frequent examples of a given category.

The prototypical GIVE light verb construction in (1) shows that the light verb *jiyu* is followed by the action nominal *guanzhu* 'attention', and the undergoer argument *ruoxiao xuesheng* 'vulnerable students', introduced by the preposition *dui* 'to', is placed preverbally as an oblique.

(1) *laoshi dui ruoxiao xuesheng jiyu gengduo guanzhu.*¹ teacher to vulnerable student LV more attention 'Teachers paid more attention to vulnerable students.'

(ToRCH 2009)²

Typologically speaking, LVCs have close historical association with their independent verb counterparts (see Butt 2003, 2010; Butt & Lahiri 2002, amongst others). However, the question concerning whether light verbs are originated from their corresponding independent verbs is not without contention. Nevertheless, this study holds that, as often posited, light verbs enter the grammaticalisation cline, and are prone to further reanalysis into an auxiliary (e.g. Hopper & Traugott 1993; Hook 1991, amongst others), see the manifestation in (2).

(2) full verb > (vector verb/light verb) > auxiliary > clitic > affix

(based on Hopper & Traugott 1993: 108)

Following this, the above three Mandarin light verbs are also believed to be developed from their independent verb counterparts in Classical Chinese.³

1.2 Corpus Observations

This study takes a usage-based approach to look at Mandarin LVCs. The ToRCH 2009 corpus was used as the main source of data in this study. Patterned after the Brown Corpus (the first large-scale electronic corpus developed at the Brown University, see Francis & Kucera 1979), this one-million-word corpus of Mandarin Chinese is composed of texts published in the year of 2009 (\pm 1 year) and covers four broad text categories, i.e. press, general prose, learned writing, and fiction. The broad collection of data is meant to represent usages from all text types. Similar to the Brown corpus, the ToRCH 2009 corpus also consists of 500 samples of approximately 2,000 words each. This corpus is readily accessible both online⁴ and offline.

In addition to the prototypical construction in (1), GIVE LVCs can have nonprototypical syntactic variants. For example, the undergoer argument in *jiyu*-LVCs can be alternatively realised between the LV and the action nominal, as illustrated in (3).

¹ The following abbreviations are used in the paper: AN=action nominal; ASP=aspect marker; CL=classifier; DE=pre-nominal modification marker *de*; DO=direct object; IO=indirect object; LV=light verb; PERF=perfective marker; SPC=subject predicate connector.

² Note that all examples, except for those constructed/invented ones, will be followed by a citation of the corresponding sources (e.g. reference to others' articles, a corpus name, or a URL from the Internet) in round brackets, throughout the paper.

³ The periodisation in this study is as follows, following Sun (1996): *shanggu hanyu* 'Old Chinese' (500 B.C.-A.D. 200), *zhonggu hanyu* 'Middle Chinese' (201-1000), *jindai hanyu* 'Early Mandarin' (1001-1900), and *xiandai hanyu* 'Modern Mandarin' (1901-present). Furthermore, I adopt 'Classical Chinese' as a cover term to refer to both Old Chinese and Middle Chinese, and *dangdai hanyu* 'Contemporary Chinese', a subsection of Modern Chinese, to refer to the one from the year of 2000, especially those retrieved from the ToRCH 2009 in this study.

⁴ To access, check <u>http://111.200.194.212/cqp</u> (last access October 4, 2015).

(3) *laoshi jiyu-le ruoxiao xuesheng gengduo guanzhu.* teacher LV-ASP vulnerable student more attention 'Teachers paid more attention to vulnerable students.'

In the above examples (1) and (3), the undergoer argument is specifically realised as a theme and is subcategorised for by the verbal counterpart of the action nominal. However, the oblique can also be realised by an argument that bears no subcategorisation relation to the verb. For example, the oblique *kaifa shengwuneng chanpinde qiye* 'companies that develop biofuel' in (4) is not subcategorised by the action nominal *jian* 'reduce', which, in fact, specifies the theme argument *shui* 'tax' incorporated into the action nominal.

(4) *guojia dui kaifa shengwuneng chanpin-de qiye jiyu jian-shui.*⁵ country to develop biofuel product-DE company LV reduce-tax 'The country cuts the taxes of the companies that develop biofuel products.'

The property associated with those syntactic variations is the different preferences regarding the presence of aspectual markers. Before going into any detail, I will briefly review the aspectual system in Mandarin Chinese. Although a consensus is hardly ever reached regarding the aspectual meaning of the four grammatical aspects in Mandarin, there is a general agreement that imperfective markers *-zhe* and *zai-* do not profile a boundary (i.e. the presence or absence of a final temporal/spatial endpoint, following Jackendoff 1990), while the beginning or final boundaries are grammatically marked by the perfective markers *-le* and *-guo*.

Amongst the three GIVE LVCs, *jiyu*-LVCs, as revealed in the ToRCH 2009 corpus, can take the perfective aspect markers, such as *-le*, immediately after the light verb, whereas *jiayi*-LVCs cannot, see (5) and (6).

- (5) *laoshi dui ruoxiao xuesheng jiyu -le gengduo guanzhu.* teacher to vulnerable student LV ASP more attention 'Teachers paid more attention to vulnerable students.'
- (6) weisheng bumen dui zhe-pi yaopin jiayi (*le) yange guanli. health department to this-batch medicine LV ASP strict regulation 'The health department strictly regulated this batch of medicines.'

Such differences have been observed in Hu & Fan (1995), Diao (2004) and Kuo (2011) too. To account for this, Kuo proposed that *jiayi* is not a verb, but a preverbal affix in Mandarin Chinese. This analysis is further claimed to be applicable to other light verbs in the GIVE group, that is, *jiyu* 'give' and *yuyi* 'give'. However, my investigation into the ToRCH 2009 corpus offers some counter-examples. Firstly, Kuo claimed that the proposal that *jiayi* was a preverbal affix was supported by the fact

⁵ I would like to thank one of the anonymous reviewers to point out the glossing of action nominal in this study. Chinese is a morphologically poor language and this is especially true in the case of action nominals, which have no morphological change vis-à-vis their corresponding verbal forms. In terms of *jian-shui* in example (4), it is composed of a verb *jian* 'reduce' and its object *shui* 'tax' (see the glossing line). When occurring with a light verb, we regard *jian-shui* as a single unit with nominal properties, rather than as two units (i.e. a verb and a noun). This is because the object of the action nominal, if realised, has to be fronted as an oblique object in Mandarin LVCs. As such, *jian-shui*, although its morpheme-by-morpheme glossing is 'reduce-tax', is still translated as a single unit of nominal phrase meaning 'tax reduction' or 'tax relief' in English.

that *jiayi* and the following complement could not be separated by numeral-classifier modification, as illustrated in (7).

(7) Zhangsan [dui zhe-ge anzi] jiayi (*san-ge) diaocha. Zhangsan to this-CL case give three-CL investigate 'Zhangsan gave three investigation of this case.'

(Kuo 2011: 141)

However, while there is no occurrence of *jiayi*-LVCs whose complements are modified by a numeral-classifier combination, the corpus data show some cases where the action nominal can be modified by adjectives, see the adjectival modification *renzhen* 'careful' in (8). Further, the example shows that *jiayi* and its complement *kaolü* can be separated.

(8) *laoshi dui zhe-ge ti'an jiayi renzhen kaolü.* teacher to this-CL proposal LV careful consideration 'The teacher gave careful consideration to this proposal.'

(ToRCH 2009)

This example suggests that *jiayi* is not a bounded morpheme and that the complement contains some nominal properties. It is therefore not appropriate to claim that the 'complement' (i.e. the action nominal in my study) is the main verb, and consequently treating the light verb as a preverbal affix is not proper. Hence, the light verb in my study is still argued to be a verb, which undergoes morphological changes, and the complement is grammatically a noun.

Furthermore, the corpus data do not support the extension of Kuo's proposal to the other two GIVE LVCs, in particular to *jiyu*. While the corpus investigation subscribes to the generalisation that aspectual markers cannot co-occur with *jiayi*, statistical results show that 22% (17/77) of *jiyu* light verbs is attached to the aspect marker *-le*, followed by one instance in *yuyi*-LVCs.

The search from the larger CCL (Centre of Chinese Languages, Peking University) Corpus (125 million Chinese words, as of July 2015)⁶ further shows more aspectual properties concerning the three LVCs, see Table 1 where the token frequencies of each light verb in the ToRCH 2009 and CCL corpora can be seen.

		Imperfective markers						
	-le		-guo		-zhe		zai-	
	ToRCH	CCL	ToRCH	CCL	ToRCH	CCL	ToRCH	CCL
	2009		2009		2009		2009	
jiyu	17	4624	-	31	-	5	-	8
yuyi	1	119	-	-	-	-	-	3
jiayi	-	-	-	-	-	-	-	12

Table 1: The aspectual properties evidenced in the ToRCH 2009 and CCL corpora

From Table 1, the aspectual properties of the three light verbs can be generalised as follows: only perfective aspects, in particular *-le*, can occur with GIVE light verbs, and such aspectual encoding is largely preferred in *jiyu*-LVCs, rarely occurs in *yuyi*-

⁶ To access, please see <u>http://ccl.pku.edu.cn:8080/ccl_corpus/</u> (last access January 4, 2016).

LVCs, with no occurrence having been found in *jiayi*-LVCs. As for the imperfective markers, they seldom occur with any of the light verbs.

In the rest of the paper, I will analyse the mechanisms of constraints regarding the four aspect markers in Mandarin Chinese. But before that, theoretical foundations of the motivation and inheritance in construction grammar will be introduced in Section 2. Based on this, I will propose, in Section 3, that different patterns of (non-)realisation of aspectual markers in LVCs can be accounted for by the perfective values inherent to LVCs per se. That is to say, the three LVCs encode different degrees of perfective aspect, which influences the realisation of grammatical aspect markers. Also in Section 3, I will further provide a grammaticalisation account to their different behaviours. Having identified the different degrees of perfectivity in the three GIVE LVCs, I will take into account relevant findings from other studies concerning the syntactic alternations of GIVE LVCs in Section 4 and offer a constructional representation of the family of GIVE LVCs. This paper will be concluded in Section 5.

2 Motivation and Inheritance Between Constructions

This paper took a usage-based constructional approach. One of the tenets in this theoretical model is that constructions are inter-related in a network. In this section, I will detail the motivation and inheritance relation between constructions in Section 2.1 and the continuity and inheritance of historical information in Section 2.2.

2.1 Inheritance Relations

In construction grammar, the inventory of constructions is structured and represented as a taxonomic network, wherein each construction is seen as a node (Croft 2001: 25). Therefore, inheritance links are a central notion in many versions of construction grammar. As expounded in Lakoff (1987), motivation, linguistically speaking, concerns the explanation why it is natural for a lexical unit to mean what it means, or why it makes sense that a specific meaning is realised by a particular lexical item not others. In the model of cognitive construction grammar, the existence of any construction is generally thought to be motivated by human cognition and interaction (Boas 2013: 242-243). When it comes to constructional networks, Goldberg (1995: 67) proposes the Principle of Maximized Motivation: "If construction A is related to construction B syntactically, then the system of construction A is motivated to the degree that it is related to construction B semantically. Such motivation is maximized." Simply put, motivation can be used to explain why formally similar constructions are also semantically similar (namely, the semantic and formal overlaps of a construction), because "the inheritance network lets us capture generalisations across constructions while at the same time allowing for subregularities and exceptions" (Goldberg 1995: 67).

The advantages of proposing inheritance links are at least three-fold. First, this avoids the same information to be presented at multiple times. Since each node inherits properties from its dominating more abstract nodes above, the information only needs to be presented once at the higher and schematic level. Second, the presentation of taxonomy of constructions makes it easy to see the relation between

constructions, which is partially arbitrary and partially predictable, even though they may "not literally interact" (Goldberg 1995: 72). As Goldberg puts it, "Construction A motivates construction B if B inherits from A" (Goldberg 1995: 72). Note however that the inheritance relations are asymmetrical, meaning that if B motivates A, A would inherit all the properties of B that do not specifically contradict its own specifications. To put it in another way, B inherits some properties from A but has some additional characteristics specific to B itself. At last, the inheritance network enables us to see form and meaning systematically related to each other.

To illustrate, Goldberg (2006: 166-182) uses the Subject-Auxiliary Inversion construction (SAI), including eight varieties of utterances, such as yes/no questions (*Did she go?*) and counterfactual conditionals (*Had she gone, they would be here by now*), to discuss the motivations or inheritance amongst those constructions. Different from previous studies wherein the focus is on the formal properties shared by those constructions with little attention given to the semantic/pragmatic properties, Goldberg believes that the systematic difference of form (inversion of subject and auxiliary, as opposed to the prototypical Subject-Auxiliary construction) signals a systemic change in function, that is, the shift from the prototypical positive sentence to the non-positive and non-declarative meaning in SAI. Following this, SAI constructions all developed from the prototypical central construction; the semantic overlapping motivates the syntactic similarities between the various SAI constructions. As further shown in the detailed representation of the motivation (see Goldberg 2006: 179), constructions that do not share the non-positive properties can be motivated by those constructions that share it.

2.2 The Continuity of Diachrony and Synchrony

In line with the inheritance between constructions, usage-based grammarians, such as Bybee (1988, 2007, 2010), believe that language change is gradual and that language structures are not strictly bounded or fixed, but can be viewed as emergent, that is, being recreated based on experience or repetition, which is recorded in memory as linked to one another, in an on-going way. As a result, it is possible to explain synchronic properties from how such structures have developed. Bybee clearly addresses the inseparability of synchronic analysis from diachronic change: "the diachronic dimension is important [...] because the diachrony determines a great deal about synchronic distributions and meanings of forms" (Bybee 2010: 166, see also Bybee 1988).

As exemplified in Bybee (2010), the reason that the English negator *not* comes after (not before) the first auxiliary verb or copula verb (e.g. *do not, is not*) can be ascribed to grammaticalisation: *not* derived from the negative morpheme *nā/nō* and a noun in direct object position *wiht* 'someone, something'. At the time when VO was the word order in English, the negative element followed the verb. This suggests that historical information can be passed down from earlier stages, as a result of which the newer linguistic formations will be "heavily influenced by both immediate and long range experience with language" (Bybee & Hopper 2001: 19). My following account on the motivation of perfective constructional meaning in GIVE LVCs will draw upon the inheritance between diachrony and synchrony.

3 Perfective Constructional Meaning: A Grammaticalisation Account

In this section, I will present the diachronic and synchronic evidence of the three GIVE LVCs in Section 3.1, and argue that they are at different stages of grammaticalisation, with *jiayi*-LVCs being the most grammaticalised and *jiyu*-LVCs the least. The most grammaticalised item is assumed to include more aspectual information in itself, so it is not compatible with grammaticalisation proposal will be elaborated in Section 3.2.

3.1 Synchronic and Diachronic Evidence

A light verb is always assumed to be form-identical to an independent lexical verb in a language (e.g. Butt 2010). Since light verbs evolve from their independent counterparts (cf. Section 1.1), it is likely to see syntactic and semantic properties that are closely associated with these counterparts, i.e. that are inherited from them. Therefore, if a light verb still retains some properties associated with its corresponding independent verb, it is seen as being at an earlier stage (or lower degree) of grammaticalisation.

The three verbs *jiyu*, *yuyi*, and *jiayi*, when used as independent verbs, all mean 'give' or 'cause to receive' in their literal sense. Prototypically, the thing given is normally expressed by a genuine noun, and the three GIVE verbs usually require a giver, a recipient, and a given in their semantic representation. The syntactic realisation of the three semantic roles regarding those verbs will be illustrated in the remainder of the section.

3.1.1 Jiyu-LVCs

In Contemporary Mandarin Chinese, a full realisation of the three participants in an independent verb construction can be found in *jiyu* in particular; and all of these participants can be realised as core arguments (viz. subjects, direct objects and indirect objects).

As an independent verb, *jiyu* can be used in double object constructions. In example (9a), the recipient *xuesheng* 'student' and the theme *jihui* 'opportunity' are both realised as core arguments in the ditransitive structure.

(9) a. xuexiao jiyu xuesheng kua xueke, kua zhuanye de jihui. school give student cross discipline cross major DE opportunity 'The school gave students inter-disciplinary and inter-major opportunities.'

(ToRCH 2009)

b. 追赠已故御史曹锡宝副都御史, 依赠衔给予其子荫生。7

zhui zeng yigu yushi Cao Xibao fu duyushi, posthumously.award give late censor Cao Xibao vice censor-in-chief

yi zeng xian jiyu qi zi yinsheng. according.to given title give 3rd son student.of.the.highest education

'Posthumously awarded the late Censor Cao Xibao the Vice Censor-in-Chief, and according to the courtesy title system, his son was awarded to being admitted to the highest institution.'

(Early Mandarin, CCL Corpus)

The same syntactic structure could be found in Classical Chinese when *jiyu* was used as an independent verb as well. In the above example (9b), the independent verb *jiyu* is followed by the indirect object *qi zi* 'his son' and the direct object *yinsheng*.

As a light verb, *jiyu* takes an action nominal, from which the predicational content can be seen, such as examples in (1) and (3) in Section 1. As illustrated at the very beginning of the paper, all the three participants in the event of giving can be realised in *jiyu*-LVCs, which bear some resemblance to its independent verb counterpart. They occur in ditransitive constituency as shown in (10) where the theme and the complement occupy the positions which are normally filled in by indirect and direct objects respectively in an independent verb construction, cf. (9).

(10) ta zai shenghuoshang jiyu ta wuweibuzhide zhaogu.
 he on life jiyu her meticulous care
 'He cared for her meticulously in life.'

(ToRCH 2009)

Additionally, *jiyu*, as a light verb, can also be used in oblique constructions. The theme *huanbao-de qiye* 'environmentally-friendly companies' in the following example (11), instead of being placed after the verb similar to the one in (9), is dislocated pre-verbally as an oblique argument introduced by the preposition *dui* 'to'. This results in an OV word order, which is non-prototypical in Chinese.

(11) *guojia dui huanbao.de qiye jiyu zhichi.* country to environmental company jiyu support 'The country supported environmentally-friendly companies.'

(ToRCH 2009)

3.1.2 Yuyi-LVCs

Yuyi is made up of two characters *yu* 'give' and *yi* 'with', which have evolved into one word *yuyi* over ages. Only one of the two characters, *yu*, contributes to the meaning of the whole word, and thus *yi* can be dropped in some cases, especially in Classical Chinese.⁸ The major syntactic difference between *yuyi* and *jiyu* lies in the

⁷ To facilitate the reading of Classical Chinese (especially for readers who can understand Chinese characters), the original writing in Chinese is provided, together with romanised spelling, glossing and translation.

⁸ Note that, although *yuyi* and *yu* encode the same meaning, the former is largely preferred in Modern Chinese; this also implies that *yu*, if used in Modern Chinese, would give the text

ditransitive structure. This syntactic structure, regardless of *yuyi* acting as a light verb or an independent verb, is not attested in contemporary corpora, such as the ToRCH 2009. The conceived examples in (12a) and (12b) demonstrate that it is ungrammatical to use *yuyi* in double object constructions.

- (12) a. *xuexiao yuyi wu xuewei zhe zhengshu.
 school give no degree people certificate
 'The school gives certificates to students who do not qualify for a degree.'
 - b. **ben wen yuyi kaocha gai xianxiang.* this paper yuyi examine this phenomenon 'This paper examined this phenomenon.'
 - c. 其身之不能定,焉能予人之邑! *qi shen zhi buneng ding, yan neng yu ren zhi yi!* 3rd body SPC cannot save how can give people SPC fief 'His own life cannot be saved; how on earth can he give others fief!'

(Old Chinese, CCL Corpus)

However, the ditransitive syntactic structure was available in Classical Chinese. In (12c), the indirect object *ren* 'people' and the direct object *caiyi* 'fief' immediately follow the verb *yu*.

Similar to *jiyu*, the verb *yuyi*, when in an LVC, can realise the theme role, for instance *gai xianxiang* 'this phenomenon' in (13), as an oblique argument.

(13) ben wen dui gai xianxiang yuyi kaocha.
 this paper to this phenomenon yuyi examine
 'This paper examined this phenomenon.'
 (lit. 'This paper gave an examination to this phenomenon.')

(ToRCH 2009)

3.1.3 *Jiayi*-LVCs⁹

The syntactic contexts of *jiayi*, however, are even more restricted. In Contemporary Mandarin Chinese, *jiayi* can, by no means, function as an independent verb to take a genuine noun. This use, however, is readily available in Classical Chinese. Similar

an archaic flavour. Since ditransitive structures can only occur in four-character idioms (or *chengyu* in Chinese) which contain *yu*, it is not surprising to find that expressions such as (i) acquire an archaic reading.

⁽i) yu ren koushi

give people cause.for.gossip

^{&#}x27;give people the cause for gossip'

As for *yuyi* as a whole unit, it cannot be used in double object structures, see the following illustration in the body part.

⁹ It is interesting to note that, *jiayi*, whilst on the one hand, narrowing its syntactic contexts over the course of time (see the rest of this section), yet on the other hand, diachronically (in the Eastern Han or the Latter Han Dynasty (25-220 A.D.) as per Liu 2011) develops another functional category: a conjunction meaning 'in addition', which is still in use to date. Such use can be found in both Contemporary and Classical Chinese. However, this paper will only analyse *jiayi* as a verb, leaving the conjunction use to further study.

to *yuyi*, *jiayi* is also composed of two characters, *jia* 'add' and *yi* 'with', which integrate into one word *jiayi* over long course of evolution.¹⁰

In Classical Chinese, *jia* can be used independently as a verb. In the Classical Chinese subsection of the CCL corpus, I found *jia*, as an independent verb, occurring in both double object and oblique constructions. In example (14a), *jia* (independent verb) is directly followed by *bing* 'military force' and *wo* 'me' in the ditransitive construction; and the oblique construction of *jia* is shown in the two clauses in (14b). Although the givee role *wo* 'me' precedes the given in the first half of the sentence, and that the givee argument *ren* 'people' follows the given role in the second half of (14b), the two givee arguments, introduced by the preposition *yu* 'on/to', are both demoted as oblique arguments in the Classical Chinese sentence.

(14) a. 诸侯皆贺, 吾往贺而独不得通, 此必加兵我, 为之奈何? zhuhou jie he, wu wang he du bude er duke all congratulate I go congratulate but only not tong, ci bi jia bing WO, wei zhi naihe? receive this must add military.force me to 3rd what.to.do 'Other dukes all congratulated (him), so did I, but he did not receive me. This means that he must be going to dispatch troops on me. What am I going to do?'

(Classical Chinese, CCL corpus)

b.	子贡	言我	不欲ノ	人加于我	之事,	我亦不欲	、此加之	于人。			
	zigo	ng	yan	wo bu	yu	ren	jia	yu	WO	zhi	shi,
	Zigo	ng	said	l not	want	people	add	on	me	DE	thing
						<i>jia :</i> add 3					

'Zigong said, the thing that I do not want other people to impose on me, I also would not like it to be imposed on others.'

(Classical Chinese, CCL corpus)

Nevertheless, the above constructions became obsolete, and the undergoer argument has to be fronted as an oblique object in Modern Chinese in *jiayi* (light verb) constructions. This is exemplified in (15), wherein the theme *zheyi lilun* 'this theory' is displaced in front of the light verb *jiayi*.

(15) *yantaohui dui zhe yi lilun jiayi shenshi.* seminar to this one theory jiayi examine 'The seminar examined this theory.'

(ToRCH 2009)

¹⁰ While it is possible, as pointed out by one of the anonymous reviewers, that different componential characters in a light verb (i.e. *jiyu* is composed of two verbal characters, while *yuyi* and *jiayi* are composed of a verbal and a prepositional character) may have some influence on its linguistic properties during its evolution to a single unit, I will not go into detail regarding this matter in the current paper due to limited space.

3.1.4 Grammaticalisation Stages

I have so far outlined the syntactic development of the three light verbs from a historical perspective. The tokens of the above syntactic structures found in the ToRCH 2009 corpus are summarised in Table 2 below, followed by corresponding instantiations. As seen in Table 2, structure (a) with an independent verb can only be found in the contemporary *jiyu* construction, whereas such structure, as illustrated in Sections 3.1.1 to 3.1.3, was readily available in Classical Chinese across all three verbs.

 Table 2: Tokens of different syntactic structures concerning each GIVE verb in the ToRCH 2009 corpus

	a. IV+IO+DO	b. LV+IO+AN	c. OBL+LV+AN	d. LV+AN	Total
jiyu	32	13	34	30	109
yuyi	1	0	19	47	67
jiayi	0	0	23	45	68

(IV: independent verb; AN: action nominal; IO: indirect object; DO: direct object)

Instantiations (all retrieved from the ToRCH 2009 corpus):

a.	ta `[jiyu]	<i>v le [wo</i>] _{DO}	[rensheng	zhong	, gengwe	i baoguide	<i>jingyan</i>]₀.		
	he give	PERF me	life	in	more	precious	experience		
	'He gave me more precious experience in life.'								

b.	<i>ta zai</i> he on 'He cared for her	<i>shenghuoshar</i> life meticulously in	ĽV	[<i>ta</i>] _{IO} her	[<i>wuweibuzhide</i> meticulous	<i>zhaogu</i>] _{AN} . care
С.	ta [<i>dui zhe yi</i> he to this on 'He adequately c	<i>zuofa</i>] _{OBL} e practice onfirmed this pra	[<i>jiyu</i>] _{L∨} LV actice.'	[<i>chongfen</i> adequate	<i>kending</i>] _{AN} . confirmation	
d.	<i>ri mei</i> Japanese medi 'Japanese media		PERF	enough a	uanzhu] _{AN} . attention	

Interestingly, structures (b) and (a) are intimately connected. From a syntactic perspective, the structures in (a) and (b), apart from the light verb occupying the position which is normally used to accommodate an independent verb, remain the same. Semantically, the meaning spreads from the original notion of physical transfer in (a) to the transfer of abstract things, such as 'care', in a more general sense, exemplified in (b). This pattern nicely parallels with the model of extension (a context-induced reinterpretation of grammaticalisation) proposed in Heine & Kuteva (2007). The model suggests that the transition from a less grammatical meaning to a more grammatical meaning does not happen abruptly, but involves some intermediate stages. According to Heine & Kuteva (2007), grammaticalisation usually occurs in four different stages: from the source stage (stage I), to a new context triggering a new meaning (stage II), then to background an existing meaning (stage III), and finally to be grammaticalised to the target manifest (stage IV). As such, structure (b) can be seen as a new context triggers new meanings (namely, the bleaching of *jiyu*).

Corpus data show that, in structure (b), only pronouns can fill in the indirect object (IO) position. This is because IO sits in the middle of the sentence (i.e., between the bleached *jiyu* and the action nominal complement), the structure of

which is not suitable for newly-introduced information to get prominence (see the Chinese 'end-focus principle' in Ho 1993 and Zhang 1994). Such incompatibility further motivates the re-structuring of the extant double object LVC (i.e. structure b). Therefore, a peripheral argument—oblique—is introduced and placed in front of the verb *jiyu* to gain pragmatic prominence, thus giving rise to structure (c). This structure grew in popularity and finally, in structure (d), the theme role is not obligatorily required in the LVC, which makes '*jiyu* + AN complement' behave more like a single constituent. The diagnostic tests in (16) demonstrate that the complement *guanzhu* 'care about' cannot be separated from the light verb *jiyu*.

(16)	a. <i>faguo meit</i> French mec		<i>huiyi</i> conference			<i>guanzhu,</i> care.about
	<i>riben</i> Japanese	<i>ye jiy</i> too L ^v		.0	<i>nzhu).</i> about	

'French media have cared about this conference; Japanese media have cared about it too.'

b. faguo mein French mein		<i>huiyi</i> _ conference		•
<i>riben r</i> Japanese r				

'French media have cared about this conference, so have Japanese media.'

As we can see, the transition from (a) to (b) implies semantic generalisation, whereby new contexts entail more general meaning. This is, as observed in Heine & Kuteva (2007), one of the important factors that are responsible for grammaticalisation. However, as for the other two verbs *juyi* and *jiayi*, they both have lost lexical content to a great extent that their contemporary syntactic context mostly favours the last two structures in Table 2. This implies that *yuyi* and *jiayi* are at a later stage of grammaticalisation, compared to *jiyu*. In other words, *yuyi* and *jiayi* in particular are more grammaticalised than *jiyu*.

The syntactic patterns in Table 2 can be converted to percentages in Table 3, which gives a more straightforward visualisation to grammaticalisation stages concerning the three verbs: *jiyu* is at the earlier stage of grammaticalisation compared with *yuyi*, and in particular *jiayi*.

Table 3: The percentage concerning the distribution of light verbs and full verbs

Lexeme	Independent verb construction	Light verb construction	Grammatical morpheme
jiyu	29.4%	70.6%	F
yuyi	1.5%	98.5%	
jiayi	-	100%	

Table 2 and Table 3 demonstrate that the three GIVE verbs have diversified their uses with different grammatical status. This also nicely reflects the effects of the layering principle of grammaticalisation, as argued in Hopper (1991: 22):

Within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but may remain to coexist with and interact with new layers.

The above evidence shows the three GIVE LVCs have different degrees of grammaticalisation, based on which the proposal of different degrees of perfective aspectual value in each GIVE LVC will be argued in the next section.

3.2 The Aspectual Proposal

The earlier and latter stages of grammaticalisation respectively correspond to the realisation and non-realisation of the perfective aspect markers *-le* and *-guo*. I propose that aspectual properties encoded in the aspectual construction are represented in different degrees in terms of the three GIVE verbs, depending on the grammaticalisation stage. Since the usual grammaticalisation path is from an independent lexical verb to a grammatical morpheme (i.e. aspectual marker in this case), a fully grammaticalised light verb is inherently specified for perfective aspect, hence the light verb entails aspectual information in its own right. Therefore, it is not surprising to see that the light verb will refuse to accept the company of a perfective aspect marker.

Take the most grammaticalised *jiayi* as an example. Since it is the closest to the end of grammaticalisation, we assume that it includes more grammatical information than other GIVE light verbs. In other words, the grammatical information of perfectivity encoded in the aspectual construction of *jiayi* is sufficient to embody grammatical aspect on its own right. Therefore, the aspectual value internally conveyed in the *jiayi*-LVC makes it incompatible with any aspectual markers.

On the contrary, in less grammaticalised verbs such as *jiyu*, the aspectual information is not sufficiently encoded in the aspectual construction, thus leading it to resort to the verb to provide some more aspectual values, in order to embody aspectual information when necessary. This will result in the morphological realisations, such as the presence of aspectual markers *-le* and *-guo*, in *jiyu* light verb constructions. Recall Kuo's proposal that *jiayi* termed as a light verb in my study is analysed as a preverbal affix. Whilst her proposal has been questioned in Section 1.2, this idea nevertheless, to some extent, supports the grammaticalised status of *jiayi*, which is seen as the one closest to the grammatical end (i.e. as a grammatical affix) on the grammaticalisation continuum.

4 Constructional Framework: The Family of GIVE LVCs

The above analyses show the inheritance of perfective aspect in the three GIVE LVCs. Taking into the inherent constructional meaning and drawing upon the findings of identifiability in a previous study (Lu 2016), I will briefly present the network of Mandarin GIVE LVCs in this section.

As described in the introductory section, the GIVE LVCs have a prototypical construction, in which the undergoer argument is subcategorised by the action

nominal and realised as an oblique, and a non-prototypical variant, where the undergoer argument is placed after the light verb and occupies the position that is normally taken up by the indirect object in an independent ditransitive construction. The mechanism that conditions the alternation between the two syntactic variants, as mentioned in passing in Section 3.1.4 and argued in Lu (2016) is the identifiability of the undergoer argument, which refers to the cognitive category whether the hearer can pick the referent out from among all those which can be designated with a particular linguistic expression and identify it as the one which the speaker has in mind (Chafe 1976; Lambrecht 1994: 77). As revealed in her corpus examination, the non-prototypical ditransitive-like construction will be used if the undergoer argument is of high degree of identifiability (such as being realised as a pronoun); otherwise, the prototype oblique construction would be largely preferred. This is believed to agree with the identifiability feature in the independent GIVE construction, where the indirect object is more often than not realised by an identifiable and discourse-old argument (e.g. I gave her a book). The inheritance of identifiability is presented in Fig. 1, where different degrees of perfectivity are also demonstrated in each GIVE LVC.

In addition to the two syntactic realisations, a third syntactic variant, which is mentioned briefly in Section 1, is that the undergoer argument is not subcategorised for by the action nominal, for example (4), repeated as (17) below.

(17) guojia dui [kaifa shengwuneng chanpin-de qiye]_{poss} iyu [jian]_{AN}-[shui]_{DO}.
 country to develop biofuel product-DE company LV reduce-tax
 'The country cuts the taxes of the companies that develop biofuel products.'

(ToRCH 2009)

The undergoer argument *kaifa shengwuneng chanpin-de qiye* is the possessor of the direct object *shui* 'tax'. Similar instances can be found in *yuyi*-LVCs too. In example (18), the action nominal *qingxie* 'slop' does not subcategorise for any arguments other than the actor, so the oblique argument, which is realised by the goal of the 'slopping' event, is specified by the construction.

(18)		•	os <i>hu minzu</i> rity ethnic	,		
	<i>baohu</i>] _{goal} protection		<i>zhongdian</i> important	, 0	kie.	

'The Ministry of Culture gave special care to the protection of the intangible cultural heritage in ethnic minority areas.'

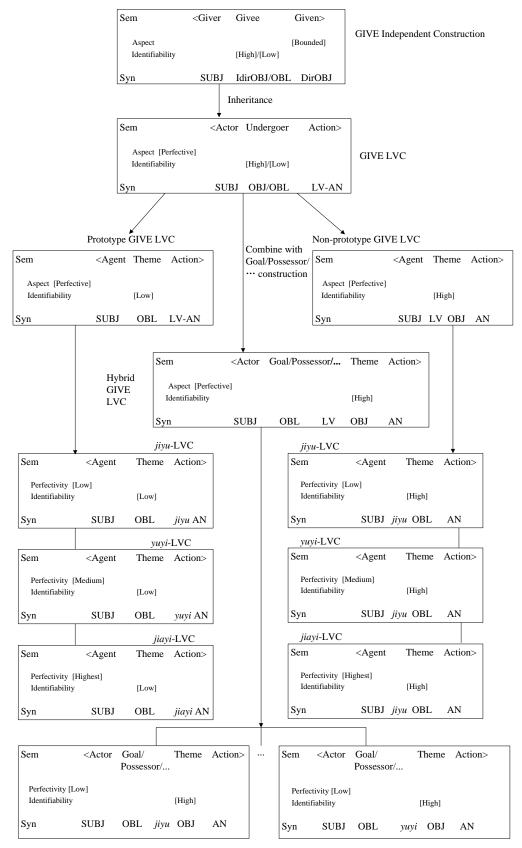


Fig. 1: The constructional representation of GIVE LVCs in Mandarin Chinese

This can be seen as a hybrid construction where a non-prototype LVC combines with a possessor/goal construction. As reflected in Fig. 1, the undergoer argument is realised as a theme in prototype and non-prototype constructions, but as a possessor or goal in a hybrid construction. The three dots in the hybrid constructions (see Fig. 1) suggest that other specified undergoer argument, although not attested in my corpus examination, may be combined into GIVE LVCs. Therefore, the formation of Mandarin GIVE LVCs is seen as conditioned by the inherent perfective meaning and the identifiability level of the theme argument.

5 Conclusion

This paper details the inheritance of semantic and syntactic information from independent GIVE constructions to the GIVE LVCs. Based on different syntactic variants evident in the three GIVE verbs, this study proposed that the GIVE verbs are at different stages of grammaticalisation, which parallels with the encoding of perfective aspect in the LVCs. More specifically, the verb *jiayi* is hypothesised to be most grammaticalised amongst the three GIVE light verbs. This means that its aspectual construction is assumed to include more grammatical information than other light verbs in the GIVE group. In other words, the grammatical information, which is the perfective aspect in this case, encoded in the aspectual construction of jiayi is sufficient to embody perfectivity in its own right. Therefore, the fixed perfective value internally conveyed in the *jiayi*-LVC makes it incompatible with any perfective aspect markers. On the contrary, in less grammaticalised verbs such as jiyu, the perfective aspectual information is not sufficiently-encoded in the aspectual construction, thus leading it to resort to the verb to provide some more aspectual values, in order to embody aspectual information when necessary. This will result in the morphological realisations, such as the presence of perfective markers -le and -quo, in jiyu-LVCs.

Taken the constructional meaning of perfectivity and the identifiability feature revealed in a previous study, I present the family of the GIVE LVCs, where constructional meaning common to all GIVE LVCs and idiosyncratic features pertinent to each LVC are clearly shown. The constructional representation takes into account finer specifications at the lexical level with insights from grammaticalisation. It is hoped that the above historical analysis on the constructional meaning in Mandarin GIVE LVCs can be extended to other LVCs in Mandarin Chinese and, broadly speaking, to other languages as well.

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