Grammaticalization of Coverbs in Modern Mandarin Chineses

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Abstract: The continued evolution of coverbs has led to the ineffectiveness of traditional criteria. In the 21st century, the emerging definition refutes the conventional view and opens up further possibilities for the identification of coverbs. The analysis finds that ba considered to be a prototypical coverb can have a verbal meaning, while other scholars believe that yong that functions as a verb can have a prepositional meaning. Thus, traditional syntactic properties are invalid to illustrate coverbs' grammaticalization and the semantic approach still lacks a clear boundary to distinguish CoVCs and SVCs practically. These arguments are not an assertion that the methods of their predecessors are wrong, but merely an indication that these approaches may not apply to judging coverbs' grammaticalization in contemporary literary languages entirely. Thus, this paper will use contemporary literature as the main field of inquiry and the corpus as the data source to argue for the grammaticalization of coverbs in modern Mandarin.

1. Introduction

Grammaticalization can be interpreted as a process whereby a grammar is created [1]. Specifically, it is the development from lexical to grammatical forms. Among the studies of grammaticalization, the coverb is the most controversial morpheme in Mandarin Chinese, which is said to be historically derived from verbs. Most studies on the grammaticalization of coverbs have used traditional syntactic and semantic features to corroborate its process. However, the continued evolution of coverbs has led to the ineffectiveness of traditional criteria. In the 21st century, Pasden defines 'a coverb is a verb that modifies the main verb of a sentence when used with its own object' [6]. This emerging definition refutes the conventional view and opens up further possibilities for the identification of coverbs. Therefore, this paper will use contemporary literature as the main field of inquiry and the corpus as the data source to argue for the grammaticalization of coverbs in modern Mandarin.

2. Literature Review

2.1 *Traditional Criteria*

Traditional analysis states co-verbs are not lexical verbs but prepositions. Syntactically, grammarians use three properties of Mandarin verbs to distinguish coverbs [8].

a) Coverbs cannot be negated such as bu

b) Coverbs cannot occur in the V-NEG-V reduplication structure

c) Coverbs cannot be followed by the aspectual markers such as zhe, le

From traditional semantic criteria, sentences with two verbs indicate two distinct actions or events, while coverb constructions express one action [4].

2.2 Relevant Studies on Co-verbs

Grammarians have made outstanding contributions exploring co-verbs' grammaticalization based on traditional syntactic and semantic criteria. Some scholars have demonstrated the validity of criteria, while others have questioned it.

Syntactically, Li and Thompson insisted that coverbs as preposition modified the verb [3]. The description is if the expressive meaning is changed with aspectual suffixes in a sentence, the morpheme belongs to a verb instead of a coverb. It means the coverb's meaning is no change with or without aspectual markers. Li supported this statement as a syntactic view and claimed that ba was a preposition in the ba construction because it could not pass all verbhood tests, but yong could function as a verb [2]. However, these statements are unreliable and easy to find exceptions. Ross and Luo argued that existing syntactic properties could not fully distinguish whether coverbs were verbs or prepositions [8]. Firstly, coverbs can occur in a negation pattern but do not frequently occur in the V-NEG-V structure. Secondly, coverbs can also have aspectual suffixation with distinct meanings. Thirdly, the verbhood is invalid sometimes because some verbs cannot act as predicates alone. Their findings effectively refute the conventional view, but examples lack universality. Semantically, Li and Thompson stated that in some contexts, coverbs never had its verbal meaning in coverb constructions (CoVCs) such as 'ba', while 'yong' was interpreted as a verb in serial verb constructions (SVCs) [3]. However, Ross and Luo elaborated no clear-cut to determine whether the coverbs acted as prepositions in CoVCs or as verbs in SVCs [8]. In this context, more grammarians have engaged in further discussion to distinguish more clearly between CoVCs and SVCs. Rhys pointed out that the coverb itself as a defective thematic role assignor had no semantic roles in CoVCs [7]. Sun clarified the definition of the SVCs that a sentence contains two or more verb phrases in a series [9]. Specifically, SVCs include complex categories such as parallel, consecutive and purposive relations. These relations are bounded by verbs instead of prepositions. Tao explicitly illustrated that the coverb pattern was not constituent with two full verbs from the theoretical framework of Role and Reference Grammar [10]. These studies specify the coverbs' semantic features, but the understanding of semantics is affected by personal subjective assumptions, so it is not entirely credible. Recent studies on co-verbs have brought the possibility of distinguishing coverbs with a different perspective. Yin indicated the CoVCs and SVCs based on cognitive grammar [11]. The finding was that SVCs have two (sub) events, both described and connected by some purpose or causality. In CoVCs, the event represented by the main verb was described, while the event represented by the coverb was largely non-salient. He places coverbs in a theoretical framework for clear identification and understanding. It brings more possibilities for the identity of coverbs rather than sticking to the morphosyntactic feature. However, confirming whether an action is described or not is affected by different semantic understandings.

These studies have provided a solid theoretical foundation for future generations of research, but still have some limitations. Firstly, these scholars look for exceptions to refute the views of others rather than use an amount of data to illustrate opinions. Secondly, the examples and data given by these studies may not be reliable and applicable because of unclear sources. Thirdly, some statements and concepts are contradictory and easy to find exceptions to make an argument.

3. Method

3.1 Procedure

The analysis will be performed with a combination of quantitative and qualitative methods. The quantitative analysis collects data and records total numbers to explore the use of co-verb in modern Mandarin. This method aims to use credible data to confirm the validity of traditional syntactic criteria standards. In addition, the qualitative analysis will enumerate typical sentences from the database to give further explanations in terms of semantic analysis, which is the focus of this essay. It explores the role of co-verbs in the sentence combining a semantic and a syntactic point of view. The analysis of the two methods is not separate but dependent.

3.2 Data Collection

The data is obtained from BCC Chinese Corpus, a large-scale and multi-field corpus with about 15 billion words, including newspapers, literature, microblogs, technology and ancient Chinese. Published modern and contemporary Chinese literature is the main field of analysis. The reason is that the language used in literary works represents a nation's language and cultural style [12]. The coverb 'ba' and 'yong' are the main research objects in this paper which are questionable items from previous studies. Most grammarians consider that 'ba' is difficult to have a verbal meaning and 'yong' is more like a verb. The data is collected by searching coverbs in the negative form, the V-NEG-V structure, and the form with aspect markers respectively.

4. Results and Discussion

4.1 Problematic Property (a) : Negation

Table 1: Counts of negative forms of coverbs

Coverb	Negation (Pinyin)	Total
ba	bu ba	2585
yong	bu yong	12153

a.	bu-yong	shui	xi-jing	tou-fa
	NEG-use(with)	water	wash-clean	head-hair
	'Washing hair without water.'			

b.	ta	guyi	bu-ba	yi-jian	shiqing	gao	qingchu
	he	deliberate	no-take(OBJ)	one-CL	thing	make	clean
	'He deliberately does not get one thing right.'						

c.	bu-yong	shui
	NEG-use	water
	'do not use water'	

d.	*ta	guyi	bu-ba	yi-jian	shiqing
	he	deliberate	no-take(OBJ)	one-CL	thing

The negation test analyzes cases where 'bu' modify co-verbs, the most commonly used negator in mandarin Chinese [9]. Table 1 shows that two coverbs can be negated with frequent occurrences,

while it does not simply mean two coverbs are verbs. Sentences in (1a-b) illustrate that 'yong' which grammarians consider verb-like can be interpreted as prepositions in the negation form, while 'ba' which is more like preposition can possess verb meaning.

In (1a), the role of 'yong' has two interpretations. Firstly, it functions as s verb 'use' with a complement 'water' and has a parallel relation with another verb phrase 'washing hair'. Secondly, it serves as a preposition to modify the main verb which means that it can be an instrumental marker to introduce how an action is achieved. Moreover, Li and Thompson state that 'ba' never has own verbal meaning in some contexts [4]. While the sentence (1b) shows that 'ba' can possess the verbal sense of 'to take' in addition to being an object maker.

In traditional semantic criteria, a coverb phrase cannot express a distinct action independently. In the sentence (1c), if the second action 'washing hair' is omitted, the sentence is still grammatically correct and expressed as a distinct action. While in (1d), it is problematic. The interpretation is that 'yong' is a verb in a serial verb construction while 'ba' is a preposition in a coverb structure. Thus, although two verbs pass the syntactic properties, the semantic approach effectively distinguishes the difference between 'ba' and 'yong' in the negation structure.

4.2 Problematic Porperty (b) : V-NEG-V Reduplication

The V-not-V question repeats the main verbs and inserts the morpheme 'not' between two identical parts [5]. The traditional feature mentions coverbs cannot occur in this structure. However, table 2 indicates that two coverbs can appear in the V-NEG-V structure.

Table 2: Counts of coverbs occur in V-NEG-V structure

Coverb	V-NEG-V Form (Pinyin)	Total
ba	ba bu ba	2
yong	yong bu yong	25

a.	ni	dao-di	ba-bu-ba	ta	dai-zou
	you	to-end	take-NEG-take	he	bring-away
	'Are you going to take him away or not?'				

b.	wo	yong-bu-yong	qinzi	guo-qu	chuli	yi-xia?
	I	use-NEG-use	personal	go-there	fix	one-CL
	'Should I go and deal with it myself ?'					

c.	* ni	dao-di	ba-bu-ba	ta
	you	to-end	take-NEG-take	he

d.	wo	yong-bu-yong	qinzi	guo-qu
	I	use-NEG-use	personal	go-there
	'Do I have to go in personal'			

From a syntactic view, co-verbs in sentences (2a-b) can occur in the V-NEG-V reduplication structure, while it does not mean they only act as verbs. In (2a), 'ba-bu-b'a can have 'take or not' meaning to ask yes or no questions and serve as an object marker to modify the main verb 'bring away'. Ross and Luo mention that adding 'daodi' into the negative string will bring a natural sound [8]. For example, 'daodi ba-bu-ba' in the sentence (2a) achieves an idiomatic expression. Additionally, 'yong' can serve as a verb to express 'use or not' or can be an instrumental marker 'with' in the V-NEG-V structure.

In a syntactic view, the coverb phrase does not normally carry primary information alone in the sentence [3]. As sentences (2c-d) show that if deleting the second verb phrase, the sentence (1c) will be ungrammatical, while it is still grammatical in the sentence (2d). It proves that a coverb must be licensed by a main verb in a relative clause [7]. Thus, 'ba' needs to be attached to an appropriate verb while 'yong' can be independent in the V-NEG-V pattern. Combining the comparison of the amount of data and the analysis of the example sentences, it finds that it is problematic to rely solely on the syntactic property (b) to distinguish coverbs or verbs, but that further analysis of the semantics is required.

4.3 Problematic Property (c) : Take aspectual marker

Traditional syntactic criteria demonstrate that most coverbs cannot take aspectual markers. While table 3 indicates that two co-verbs can take aspectual markers such as '-zhe' and '-le' but the times of occurrence has apparent differences. It shows that 'yong-le' and 'yong-zhe' appear more times than 'ba-le' and 'ba-zhe'. In Mandarin grammar, '-zhe' is used to express progressive aspect as a post-verbal particle and '-le' is suffixed to the verb as a perfective particle [5]. In addition to contributing the tense function, they have other additional meanings. For example, adding '-zhe' to verbs or activities means things or actions can last for a designated period of time, and '-le' is suffixed to the verb or adjective to make an inherent meaning of completion [5]. Thus, grammarians consider it not to be coverbs' characteristic. Li and Thompson state that aspectual marker is not obligatory in co-verb structure and few coverbs have distinct meaning with aspectual particles [3]. Besides, the coverb phrase is between the subject and the main verb and cannot start a sentence as an initial position [7]. However, the following analysis shows that these statements are invalid in the form of taking aspectual markers.

Table 3: Counts of coverbs with aspectual marker

Coverb	With -zhe (Pinyin)	Total	With -le (Pinyin)	Total
ba	ba zhe	168	ba le	46
yong	yong zhe	608	yong le	2674

a.	ba-zhe		ta	de	shou	an	qin-jian
	hold(OBJ)-PROG		she	DE(a)	hand	press	piano-key
	'Taking her hands and press the keys.'						

b.	wo	ba-le	liang-yuan	gei	ta
	I	take(OBJ)-PERF	two-CL	give	she
	'I gave her two yuan.'				

c.	* ba-zhe	ta	de	shou
	hold-PROG	she	DE(a)	hand

d.	wo	ba	liang-yuan	gei	ta
	I	OBJ	two-CL	give	she
	'I give her two yuan'				

The sentence in (3a), 'ba' starts a sentence as a predicate verb with '-zhe' has a durative meaning to express a state of constant holding or taking someone's hands. Moreover, '-le' can represent the completion of the event and the fact that it has happened [9]. In sentence (3b), 'ba-le' contributes to

an independent verb meaning, which elaborates how this action is token and completed. These examples demonstrate that coverbs can have their own distinct meanings. Meanwhile, some grammarians argue that the meaning of the sentence does not change if the aspect marker is removed [3]. Sentences in (3c-d) prove this statement is inefficient. The result of omitting aspect marker is the sentence (3c) becomes ungrammatical and the process about how an action is done is missing in the sentence (3d).

Furthermore, 'yong' is frequently used as a verb in the serial verb construction [3]. From the data alone, one can tentatively conclude that 'yong' is used more frequently as a verb, and the total number of 'yong-le' is over two thousand. However, it needs a further sematic analysis.

a.	xiansheng	yong-zhe	yi-ba	xiao-jianzi	xiu-li	ta	de	zhi-jia
	sir	use(with)-PROG	one-CL	small-scissors	fix-manage	he	DE(a)	finger-nail
	'A gentleman is manicuring his nails with a small pair of scissors.'							

b.	yong-le	shi-tian	shijian	cai	dao-da	xi-hai-an
	use(with)-PERF	ten-CL	time	only	arrive-to	west-sea-bank
	'It took ten days to reach the west coast.'					

The main argument of sentences (4a-b) is that there is no clear-cut to identify the number of main actions or events in each sentence. If there are two actions in the sentence (4a-b), 'yong-zhe' and 'yong-le' will be interpreted as verbs parallel to the second verbs 'fix' and 'arrive'. In contrast, if it is regarded as one event, they will be coverbs that are non-salient in sentences. In addition to the problem of syntactic property (c), traditional semantic criteria are challenging to decide how many actions are involved in sentences. In fact, this property does not even effectively recognize verbs. Sometimes a stative predicate with a permanent meaning that cannot take with imperfective or resultative markers such as gao 'tall' [9].

Based on the analysis of problematic traditional criteria, there is no explicit boundary to distinguish 'yong' and 'ba' as coverbs or verbs. Firstly, the data shows that two coverbs can pass the verbhood test, thus this syntactic test cannot distinguish coverbs from verbs. Secondly, the semantic analysis shows that it has an obstacle distinguishing CoVCs and SVCs. Even though many grammarians have dissected the approach from various angles, the practice shows that semantic analysis is influenced by individual subjective judgment.

5. Conclusion

This essay re-examines coverbs' grammaticalization using two arguable coverbs based on the corpus database. Combining the data with syntactic analysis, yong does possess more verbal properties than ba, but semantic analysis still reveals some exceptions. The analysis finds that ba considered to be a prototypical coverb can have a verbal meaning, while other scholars believe that yong that functions as a verb can have a prepositional meaning. Thus, traditional syntactic properties are invalid to illustrate coverbs' grammaticalization and the semantic approach still lacks a clear boundary to distinguish CoVCs and SVCs practically. These arguments are not an assertion that the methods of their predecessors are wrong, but merely an indication that these approaches may not apply to judging coverbs' grammaticalization in contemporary literary languages entirely. In addition, the use of grammar and linguistic style are highly flexible in contemporary literature, which bring two limitations in this essay. Firstly, there are times when the subject is removed for the aesthetics of the context without adherence to grammar. Secondly, writers continue some of the diction handed down from ancient literature. These two linguistic features are not common in contemporary

pragmatic habits.

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