# The Study of Chinese Noun-Classifier Compounds

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**Abstract:** Chinese noun-classifier compounds have the special structure in the Chinese vocabulary system. They have their own features both in the syntactic structure and the word meaning. The particularity of noun-classifiers lies in the complexity of their internal structure. The degree of grammaticalization of classifiers gives the explanation to the differences. They can be divided into three categories, they are real noun-classifier compounds, pseudo noun-classifier compounds and the noun compounds. This paper wants to study on the inner structure of the noun-classifier compounds, and the nature of the classifier in the noun-classifier compounds

#### **1. Introduction**

In modern Chinese, there are a group of compounds which usually contain two elements, one of which is the noun, and the other is classifier. this kind of noun structure is usually called the noun-classifier compound, such as:

1	/				
cheliang (cars)	chuanzhi (ships)	mapi (horses)	huaduo (flowers)		
tianmu(field)	zhizhang (paper)	renkou (population)	qiangzhi (guns)		
huaping(vase)	shubao(school bag)	xinfeng(envelope)	yinliang (money)	(1)	
These kind of compounds have a long history, they appeared before the southern and northern					
lynasties, and became richer since then. <sup>[1]</sup> It can be seen from the above examples that among the					

dynasties, and became richer since then.<sup>[11]</sup> It can be seen from the above examples that among the two elements in these words: the first one is the nominal morpheme and the second one is the classifier morpheme. But there exists a problem. In Chinese, if the compounds contain these two elements which follow the linear structure of noun-classifier, they can be classified into the same group. While the fact shows the complexity among these compounds. Similar structures and combining forms show very different structural meanings. Among the above examples, cheliang(cars) expresses the meaning of the first morpheme che(car), while huaping(vase) expresses the meaning of the second morpheme ping(vase). But the meaning of the first kind is comparatively general and the second kink is more specific.

All the difference lead us to find the relationship between the two elements in these compounds. So this paper tries to give an explanation of inner relationship of noun-classifier compounds and the nature of the classifier.

## 2. Previous Research and Existing Problems

In China, many scholars have done extensive and in-depth research on noun-classifier compounds. Scholars have carried on the studies in the syntax, semantics, criterion and internal structure. The previous studies shows that the scholars have found the specialty of this structure, and they also have their own understand of the structure.

There are still controversial issues in the current researches; there is no conclusion about the attribute of classifier; there is still the weakness of theoretical study in it.

According to Hu Yushu (1995)<sup>[2]</sup> and Ge Benyi (2001)'s <sup>[3]</sup> opinion, the first element of the compound, in the other word, the noun morpheme is the head, and the second element functioned as the measure unit of the first noun element. Some other scholars also tried to improve this judgment. They took the typical head-complement verb compounds as the example to compare. And they even made the classification among them, they are head-complement verb compounds and

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head-complement noun compounds. In the former one, the action element is the head and the result element is the complement; while in the latter one, the noun is the head and the measurement element is the complement. Following this idea, in the compounds cheliang (cars), renkou (population), xinfeng(envelope), the first element "che", "ren", "xin" are the heads; the second element "liang", "kou", "feng" are the complement, but they really don't make sense all the time, because in "xinfeng" (envelope), "xin" cannot functioned as the head according to the word meaning.

On the other hand, some scholars held the opposite view, such as Lu Zhiwei (1964)<sup>[4]</sup>, Zhao Yuanren (1979)<sup>[5]</sup>, Zhu Dexi (1982)<sup>[6]</sup>. According to their main point, the second morpheme in the noun-classifier compounds is the head, that is to say that the classifier is the head while the noun morpheme is the modified component which is used to modified the classifier. The classifier is used as the Abstract noun to make the compounds. In their explanation, "che" is used to modify "liang" in "cheliang"(cars), "hua" is used to modify "duo" in "huaduo"(flowers), "qiang" is used to modify "zhi" in "qingzhi"(guns). This kind of meaning is hard to be accepted in these examples.

Due to the influence of western linguistics, scholars have begun to investigate Chinese language phenomena from the perspective of western language structure. Some scholars as Ren Xueliang (1981)<sup>[7]</sup>, Ma Qingzhu (1987)<sup>[8]</sup>, etc. they regard the noun-classifier compounds as the additive structure, and consider that the grammatical position of classifier in this kind of lexical structure is grammaticalized affix, which is attach to the noun stem and forms disyllabic compound words. This kind of explanation also cannot give a full picture of the all the similar constructed structure.

Some other scholars like Li Zongliang<sup>[9]</sup> also mentioned that the relationship between the two elements in the compound is coordinate. They think in the compound, the classifier's meaning gradually tends to the meaning of the preceding noun morpheme. And, more often than not, it tends to become a noun with similar meaning. And the two ingredients are often used together. In the other words, some classifiers will be exclusive to certain nouns.

From the previous studies we can find that most studies focus on the description of this special linguistic structure and also the summary of grammatical rules. Different scholars have different opinions about the structure of the noun-classifier compounds, but there is still no consensus on it. The category of the classifier has not been determined. This kind of compounds, as showed above, have same linear structure which contain a noun morpheme at first and a classifier morpheme followed. The same structure does not mean the same properties and generation mechanism. Such characteristics have been found in previous studies. The same structure can still lead to different semantic interpretations. Only by understanding the semantic characteristics of these structures can we truly understand their structural nature. It is believed that the classifier morpheme is the key element in the classification of this type of compounds.

This paper mainly attempts to analyze the structural and sematic relations between noun and classifier morpheme in the structure and tries to recognize the category of the classifier.

#### 3. The Semantic Characteristics of the Constituent Morphemes in Chinese Noun-Compounds

Because of the complexity of the noun-classifier compounds, we assume that they are not generated by the same ways of word formation.

The noun-classifier compounds are two-syllable nominal structures composed of a noun morpheme and a classifier morpheme. In most cases, the noun morpheme and the classifier morpheme are fixed relation collocation. Semantically speaking, they are used to express the collective meaning.

This way of word formation is significantly different from the western languages represented by English, which often express the grammatical meaning of set and general name through word end deformation, such as poem  $\rightarrow$  poetry. Due to the lack of morphological changes in Chinese characters, the collective meaning cannot be expressed through this way. This paper believes that it is represented by affixes in Chinese.<sup>[1]</sup>

According to the evolution of Chinese vocabulary system, the formation of Chinese classifiers obeys the following the same course of evolution of the affix. This process is from lexical words to

functional words, and form the clitic to the affix. This process causes the complexity of the noun-classifier compounds. The classifiers may stay in the different stage of the development, some are real classifier, some are not complete classifier, and some may be even the noun. The compounds with the same surface structure may have the totally different inner structure and meaning.

How to have a deep understanding of the noun-classifier sequence compounds? The classifier is the key to recognize the category of the so called noun-classifier compounds. In the other words, the degree of grammaticalization of the classifier can distinguish the levels among all these noun-classifier sequence compounds. There are two clear examples which can give a clear picture of the degree. In the compound cheliang (cars), "che" is the core element which donates the meaning of the whole compound; however, in huaping (vases), "ping(bottle)" is the core element, "ping" here cannot functioned as the classifier, it is still the noun, it is still at the beginning of the evolution. According to the above development process, three kinds of the noun-classifier sequence compounds displayed.

There is a kind of noun-classifier sequence compounds with its noun morpheme as the core semantic element, but not the classifier. The meaning of the compound mainly refers to the meaning of the noun morpheme in the structure. At the same time, its meaning is the collective meaning of the noun morpheme, such as cheliang (cars), chuanzhi (ships), mapi (horses).

a. ma-pi

horse-classifier cars

b. yi-pi-ma one-classifier-horse one horse

c.\*yi-pi(zhi)-mapi one-classifier-horses one horses

d. daliang-ma-pi

Quantifier phrase - horse-classifier a lot of horses

(2)

(3)

From the above example, it can be seen that the two morphemes can be converted with typical quantitative and nominal structure in Chinese. However, when two morphemes appear as a whole, they have collective meaning and cannot be modified by quantifiers, as in the example c.

So we can find as the compounds with noun morpheme as the core element have the collec-tive denotation, it is contradicted with the concrete quantity expressed by numerals. But when it represents a collective concept, it can be modified by quantifier phrases which is used to modify a large number of the things as in the example d.

In the opposite class of words, the noun-classifier sequence compounds with its classifier morpheme as the core semantic element, but not the noun. The meaning of the compound mainly refers to the meaning of the classifier morpheme in the structure, such as, huaping(vase) shubao(school bag) and xinfeng(envelope). It shows that the classifier doesn't function as the numeral, but tends to be a noun.

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a. hua-ping
classifier-bottle
vase
b. yi-ping-hua
one-classifier-flower
one bottle of flowers
c. yi-ge- hua-ping
one-classifier-vase
one vase
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And the examples showed above can be modified by numerals. They don't have the collective

meaning. So this paper believe that this kind of the noun-classifier sequence compound are not the typical ones, because the noun is not developed into the real affix, in the other words, the classifier.

Different from the former two kinds of the noun-classifier sequence compounds, there are a group of similar kind of compounds which don't have the core semantic morpheme in the structure, such as qiang-gan (gun-barrel), guapian (melon-piece), yin-liang(silver-fifty gram). Among these compounds guapian refers to a kind of tea, qianggan is the metonymy of weapon, yinliang means money, from all these examples, nothing can be related to each of the two morphemes in the structure.

From the meaning distribution among the words, we can have a clear understanding of the semantic structure of the compounds. Only the words in the example (2) are real noun-classifier compounds with the second morpheme is grammaticalized into affix, and the collective meaning.

#### 4. The Category of Chinese Classifier

As illustrated in the above examples, the noun-classifier sequence compounds can be divided into different groups according to the degree of the grammaticalization, which leads to the question of the category of the classifier. It is important to have a deep understanding of its structure.

In the past, the classifier is considered to be the quantifier which can be used to join with the numeral to modify the nouns. About it, scholars have done a lot of research, there appears different points of view. The classifier should be distinguished from the quantifier. The classifiers refer to follow Chinese words, such as liang, ben, zhi, while the quantifiers refer to another kind of words as bao, he, xiang. That is to say that Chinese classifiers usually used with counTable nouns, while quantifiers often used with are the uncounTable nouns or used with the counTable nouns to describe the collective meaning.

While under the scope of the UG, this paper adopted the opinion from An (2009)<sup>[10]</sup>, An & Cheng (2011<sup>[11]</sup>, 2014<sup>[12]</sup>).Chinese classifier is regarded as the functional head. According to the recognized characteristics, functional category belongs to the closed class, and has the feature of categorical selection, the functional head is not the free morpheme. The classifiers summed up in this article meet this standard. The number of such words is limited. The classifiers has the feature of category selection; it only select noun as its complement, it also cohesive under its surroundings. They also points out that Chinese classifiers derived from nouns, but only counTable nouns are the source of them. They also prove that classifier is light noun which mark the countability. It is believed that there must be a functional null morphological element the classifiers' evolutional process which is finally obtain the morphological form. It is what this paper called the light noun "n".

In a word, the classifier belongs to the functional category. It occupies the head position. It has own features and properties.

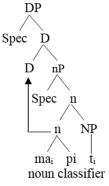
#### 5. The Structure of the Chinese Noun-Classifier Compounds

On the basis of clarifying the syntactic feature if the noun-classifier compounds, we will further explore the formation mechanism of them.

We assume that classifiers generate at the position of n, and it is the head of nP. It takes the noun as its complement due to the category selection. That is why noun phrase always appears after classifier. And the numerals belong to the open class, so they do not belong to the functional category, and they locate at the position of [Spec n]. As mentioned above the light n has the feature of [+count], it must be checked, or the phrase will crash. Only until the feature is checked can the numeral be inserted in the [Spec, n] positon. Take yi-pi-ma (a house) as an example, the classifier "pi" is the head of light n, and then noun phrase "ma (horse)" followed. At the beginning of the structure placed the numeral yi (one) in the position of [Spec n]. The light n, classifier has to check the [+count] feature of the noun phrase ma (horse). After the counTable noun phrase is check, the numeral is inserted to the [Spec n] position.

As showed above, the semantic core of the noun-classifier compound is the noun morpheme.

Since both the noun-classifier compounds and quantifier-noun structures have measurement functions, and the semantic center of Chinese noun phrases is generally at the back of the structure. We propose that the traditional sequence is noun-numeral-classifier, and then the sequence changes into numeral-classifier-noun. And when the numeral is one and it can be omitted in the speaking. It is the reason why Chinese noun-classifier compound can form. The change of the linear order must cause the change of the property of the words. During the change of the morphemes order, noun-classifier generates new features. It can be illustrated as follows:



(4)

The classifier pi generates at the position n, it takes the noun phrase ma (horse) as its complement. After the change of linear order, it moves to the position of n and joins with n. and a new syntactic structure emerged, that is mapi (horses), and then it moves to D. And finally it owns the collective interpretation.

#### 6. Summary

The noun-classifier compounds are very special in Chinese vocabulary, there are not many of them, but they show their unique syntactic and semantic characteristics. When the linear order of Chinese quantity structure changed, the composition characteristics also changed. So the noun and the classifier compound in the position of light noun in the nP structure. The noun-classifier sequence also has a completely new collective explanation.

## References

[1] Sun, Wentong. On the derivation of noun-classifier constructions: A formal syntactic approach. Journal of Anhui University of science and technology (Social science edition). Vol. 20 (2018) No. 02, p. 72-76.

[2] Hu, Yushu. Modern Chinese. Shanghai Education Press, 1995, p. 46-51.

[3] Ge, Benyi. Modern Chinese Lexicology. Shandong People's Publishing House, 2001, p. 51-60.

[4] Lu, Zhiwei. Chinese Word formation. Beijing Science Press, 1964, p. 41-56.

[5] Zhao, Yuanren. A Grammar of Spoken Chinese. The Commercial Press, 1979, P. 181-222.

[6] Zhu Dexi. Lectures on Chinese Grammar. The Commercial Press, 1982, p. 51-52.

[7] Ren, Xueliang. Chinese Word Formation, Beijing social sciences press, 1981, p. 112-124.

[8] Ma, Qingzhu. On Semantic Grammatical Categories in Chinese. Beijing Language and Culture University Press, 1987, p. 154-203.

[9] Li Zongjiang. Counterprocess in grammaticalization and the lexicalization of Chinese Classifiers. Research in Ancient Chinese Language. Vol. 65 (2004) No. 04, p. 62-67.

[10] An, Fengcun. On interior adjustment of language structure from the grammaticalization of classifiers. Chinese Language Learning. (2009) No. 4, pp. 56-60.

[11] An, Fengcun & Gong Cheng. A study on morphosyntactic properties of chinese classifiers.

Chinese Language Learning. (2011) No.2, pp. 44-47.

[12] An, Fengcun & Gong Cheng. A study on syntactic function of Chinese classfiers in generative perspective. Journal of PLA University of Foreign Lnaguages. Vol. 35 (2014) No. 3, pp. 51-58.