



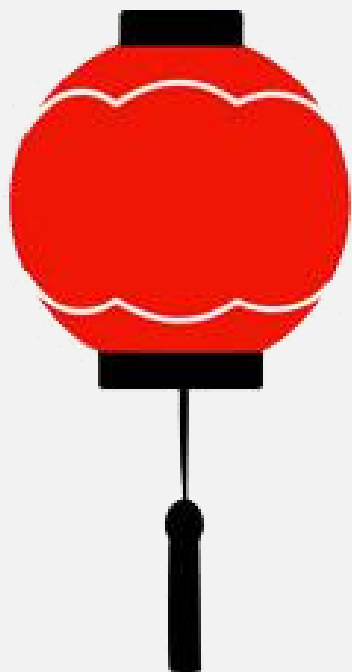
Diachronic Investigation
into Classifier Reduplication
in Mandarin Chinese

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Overview

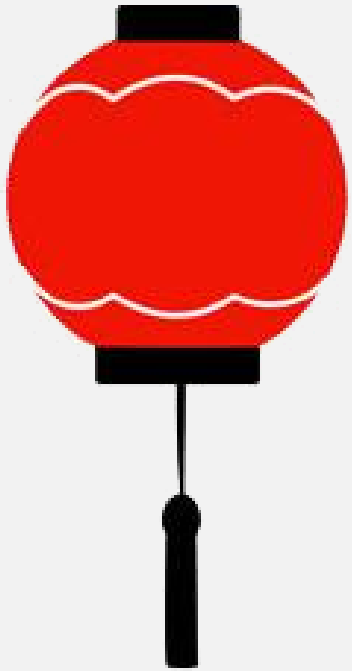
1. Introduction: Classifier Reduplication
2. Research Question
3. Methodology/Case Selection
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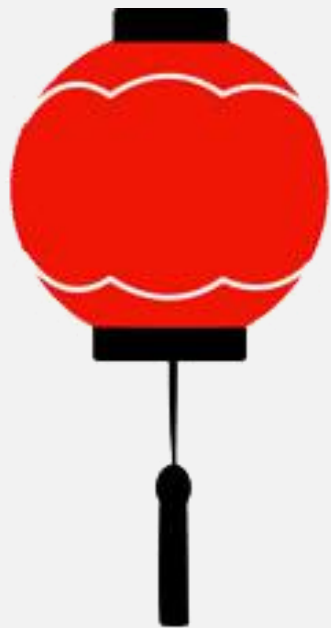
What is Classifier?

1. **Environment:** Chinese requires all the nouns including those whose English equivalents are countable to use a measure phrase or classifier when they co-occur with numerals. In modern Mandarin Chinese, classifier is also obligatory with demonstratives.
2. **Role:** individual **functional category** serving to indicate relationships between nouns and numerals or demonstratives when they are used as classifiers
3. **Function:** individuation and enumeration (Lyons), similar to the function of distinction of countability in English;
a focus of individualized attention(Erbaugh)
4. **Example and Understanding of Classifier:** one classifier book, two loaves of bread

Classifier and Grammaticalization



Classifiers developed from nouns, the changes from “content” nouns to classifiers has usually been considered as **grammaticalization** (Hopper and Traugott. 2003:2-4)



Classifier Reduplication

CC Construction

(1) Classifier Reduplication as Anaphoric Subject

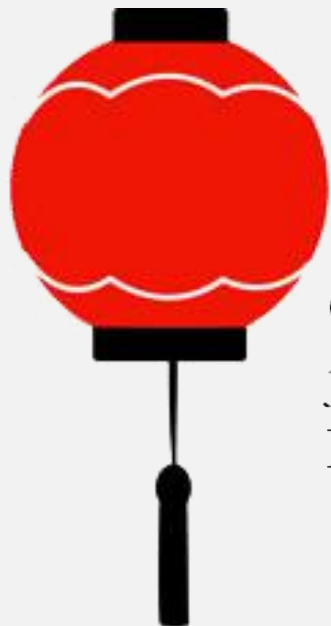
kan XiLiang zhi bing, ge~ge yingxiong.
look LOC POSS soldier;PL, CLF~ heroic

‘Look at soldiers of XiLiang, every one of them is heroic.’ (Ming Dynasty, 1368-1644, CCL corpus)

(2) Classifier Reduplication as an Adverbial

Niang ai de langjun ge~ge cun
Mother favour DE boy CLS~ vulgar

‘Boys favoured by mother are all vulgar.’ (Yuan Dynasty, 1279-1368, CCL corpus)



Classifier Reduplication- Other Variants

Reduplication of the whole numeral expression containing classifier

(3) One-CC used as an adverbial

jian Tamen yi-ge~ge zhuangshu xingli.

Find they one-CLS~ pack up luggage

‘Find they start to pack up luggages’ (Qing Dynasty, 1644-1911, CCL corpus)

(4) One-C-one-C used as an adverbial

yi-ge-yi-ge yuechu qiang wai

one-CLS-one-CLS over wall outside (Qing Dynasty, 1644-1911, CCL corpus)

‘(they climb) over the wall one by one’



Classifier Reduplication- Function and Semantics

Function

According to previous studies, CC construction, one-CC construction and one-C-one-C construction can also be used as modifier, predicate, object, adverbial and predicative complement.

Semantics

classifier reduplication can indicate every single unit in the referential noun. Guo described this function as “multiply-individulize”(2013: 13), to be specific, classifier reduplication repeats the process of individulization to get a description of every individual in the referential noun phrase.



My Research Questions

- ①CC
- ②one-CC
- ③one-C-one-C

What is syntactic and semantic difference of these three structures in their evolution?

What is the relation among these three constructions?

How the variation of these three constructions reflects the development of classifiers?

Methodology

1. Choose two typical classifiers **ge** and **duo** to explore these three constructions.
2. Divide the whole time period into 7 parts according to a chronology of the dynasties in Chinese History: Tang(618-907), Wudai(907-960), Song(960-1279), Yuan(1279-1368), Ming(1368-1644), Qing(1644-1911), Republic of China(1911-1949), these periods are **not of equal length**.
3. Conclude the types of environments of these three constructions, record the token frequency of every type
4. Quantitative Analysis: apply Kendall's rank correlation test to data extracted from more than 4 time periods to see whether there is a **correlation between environment frequency and the passage of time**; Apply Chi-square Test to see if there has been a certain **proportional difference among environments of these three reduplication constructions**.
5. Discussion: Discuss the **semantic meaning** of these three structures and **how classifier changes** in the evolution of these three constructions.

Result: Detailed Explanation of 5 Environments

3. Conclude the types of environments of these three constructions, record the token frequency of every type

Result 2: 5 categories of Environments

_(de)NP: These three constructions function as modifier of subjects or objects

#_(de)VP/AP: These three constructions can be viewed as adverbial accompanying the predicate or anaphor of antecedent subject.

VP_VP/AP: The verb preceded is usually auxiliary verb so the reduplication construction still behaves like adverbial

NP_(de)VP/AP: these three constructions function as adverbial inserted between NP and predicate

Result

4. 1 Quantitative Analysis: apply Kendall's rank correlation test to data extracted from more than 4 time periods to see whether there is a correlation between environment frequency and the passage of time

Result 3 : Change of Environment

Only CC-construction presented a significant change in three environments

4. 2 Apply Chi-square Test to see if there has been a certain proportional difference among environments of these three reduplication constructions.

Result 4 : Difference between CC-construction, one-CC construction, one-C-one-C construction

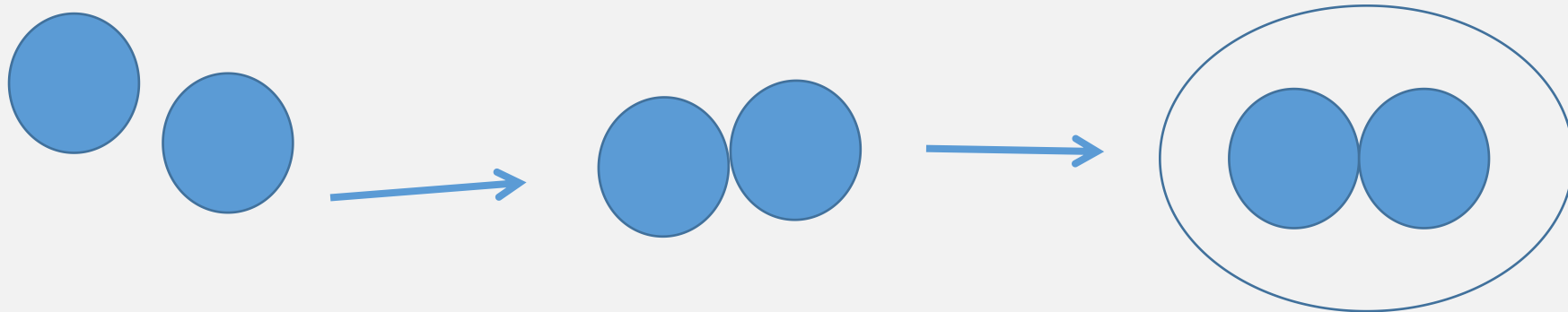
The p-value of two Chi-square tests indicates that the distribution difference between the environments of gege, yi-gege, yi-ge-yi-ge is highly significant, the null hypothesis can be rejected at a high confidence level. Gege is used in environment #_(de)VP/AP most frequently while yi-gege and yi-ge-yi-ge are used more free.



Discussion : The Syntax relationship of These Three Constructions

1. Except for these two differences in rare cases, **these three constructions can substitute each other in most environments and present a similarity in significance.** According to Saussure(1993: 121), the relations and differences between linguistics items fall into syntagmatic category and paradigmatic category, we could say that **these three constructions establish a paradigmatic relation in forming the strings: #_(de)VP/AP, VP_VP/AP, NP_(de)VP/AP.**

2. Diachronic trajectory of their relationship: Lexicalization





Discussion : Increasing Semantics Tendency of “Sequence”

There is an increasing semantics tendency of ‘sequence’ (2008: 116-24) from CC-construction to one-CC construction to one-C-one-C construction proved by evidence in data

Proof from Data:

“Zhu” in Chinese is an adverbial indicating something happens in order, in example 9 we observe that zhu is allowed to exist before gege. However, no example of zhu preceding yi-gege and yi-ge-yi-ge exist in data, indicating that CC-construction can not denote ‘sequence’ but the other two constructions can.

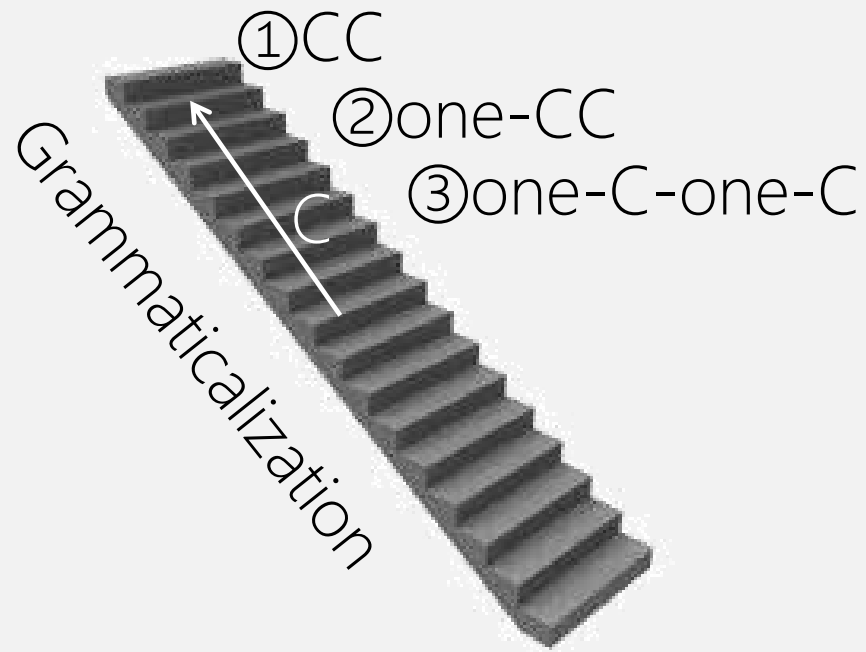


Discussion : How classifier changes in the evolution of these three constructions.

1. As use of classifier reduplication introduces, the syntactic position of classifier is no longer bound in noun domain during the transition from individual classifier in numeral expression to classifier reduplication
2. In the orderly development of these three constructions, the distance between classifier and NP has been expanded; the expanded distance between classifier and noun may indicate that classifier has been used more as a individual category separately from noun. So in the supposed lexicalization of these three constructions, classifier has undergone grammaticalization.



Conclusion and Further Thoughts



1. Three Construction: The variation of these three constructions presents the process that lexicalization as an indicator introducing new lexical units to climb up the clines of grammaticalization.

2. Classifier: Separated from the noun in syntax; doesn't change in semantics

2. Grammaticalization might not be proved by one single indicator.



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[Thanks for Listening]

