Figurative Extension of Chinese Classifiers

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ABSTRACT
This article investigates metaphorical and metonymical extension of Chinese classifiers. A working definition of Chinese classifiers is determined in relation to Chinese measure words in the first place. Explored subsequently are (1) metaphorical extension of Chinese classifiers in terms of metaphorical theme, vehicle, and analogy and (2) metonymical extension of Chinese classifiers in terms of various schemas of metonymic association. It is found that figurative meanings or usages of Chinese classifiers arise from syntagmatic or paradigmatic extension and that a Chinese classifier concatenates with a succeeding noun to form a metaphor- and metonymy-rich phrasal construction, which is a distinctive feature in contrast with other types of Chinese measure words.

Key Words: Chinese, classifiers, metaphorical extension, metonymical extension, measure words
I. INTRODUCTION

A classifier is a morpheme that categorizes entities or phenomena by picking out some salient perceptual properties (cf. Allan [2], Lyons [21], Tai and Wang [33]). A language has a classifier system if it has grammatical devices that oblige speakers to categorize a referent along specific semantic dimensions (cf. Goddard [9], Rijkhoff [27]). It is well known that Chinese has an extensive system of numeral classifiers. In Chinese, classifiers categorize nouns into semantic groups. Chinese classifiers usually have to occur between a head noun and a prenominal numeral or demonstrative, such as the following, in which ‘CL’ is short for ‘classifier’:

1. dier ben shu (第二本書; ‘the second CL book’)  
2. na ben zidian (那本書典; ‘that CL dictionary’)  
3. liu ben xiangbu (六本相簿; ‘six CL photo albums’)

This paper is intended to investigate figurative extension of Chinese classifiers. By the word Chinese I mean contemporary Mandarin Chinese used in Taiwan. In Section II we address the issue of identifying Chinese classifiers. Section III explores metaphorical extension of Chinese classifiers. Section IV concentrates on discussion of metonymic extension. And in Section V we have an overview of the range of the figurative extension in question.

This article is based on a corpus of more than four thousand Chinese classifier phrases I have collected from Mandarin Chinese Daily News Dictionary of Measure Words [11] and The Academia Sinica Balanced Corpus, whose public web access is at http://www.sinica.edu.tw/ftms-bin/kiwi.sh. A total of 190 Chinese classifiers have been identified (see Appendix) in accordance with the following criterion: A Chinese classifier is a measure word that categorizes one class of co-occurring nouns or more in reference to salient perceptual properties of the referents of the co-occurring nouns. This criterion will be discussed in the section that follows.

II. CHINESE CLASSIFIERS AND MEASURE WORDS

In the literature on Chinese grammar, classifiers are often dealt with on a par with measure words. Li and Thompson [18] hold that a Chinese measure word can be a classifier. On the other hand, Li [19] distinguishes classifiers from measure words, contending that, whereas true measure words usually occur with non-count nouns, classifiers usually occur with count nouns whose referents are inherently and directly quantifiable. Tai and Wang [33] and Biq et al. [4] also differentiate classifiers from measure words. They hold that a classifier is restricted to co-occurrence with a class of words that share some salient perceptual properties, while a measure word simply quantifies the entity named by a noun. In addition, Chao [7] treats Chinese classifiers and quantifying collectives as two different types of measures. These different views or treatments are probably caused by the vague sense of the term ‘measure word.’ It may be used to refer only to standard measure words like kela (公斤; ‘carat’), nian (年; ‘year’), gongli (公厘; ‘millimeter’), and jalun (加仑; ‘gallon’). In the widest sense of the term, ‘measure word’ may also include quantifying collectives, container measures, and such unit classifiers as zhong1 (中, a classifier for something that has a flat surface) and wei4 (位, a polite classifier for people).

As I see it, Chinese measure words, in the broadest sense of the term, refer to a class of words occurring with numerals or demonstratives to enumerate or individuate entities or states of affairs. In Mandarin Chinese a classifier is a measure word that categorizes one class of co-occurring nouns or more. Based on a balanced electronic corpus, Mandarin Chinese Daily News Dictionary of Measure Words [11] divides Chinese measure words into the following seven classes:

1. General measure words, such as ben3 (本, zhili1 (支), qun2 (群), and shu4 (束).
2. Event measure words, such as chang3 (場), zhuanl (軸), dun4 (頓), and ji4 (紀).
3. Categorical measure words, such as zhong3 (種; ‘kind’), leili4 (類; ‘category’), yangli4 (形; ‘type’), and shili4 (式; ‘style’).
4. Approximation measure words, such as si1 (些), gu3 (個), gan1 (賬), and shen1 (時).
5. Container measure words, such as bao1 (包; ‘pack’), xiangl (箱; ‘box’), tong3 (桶, ‘bucket’), and lan2 (籃; ‘basket’).
6. Standard measure words, such as bang4 (磅; ‘pound’), gonglichei3 (公斤; ‘meter’), da3 (打; ‘dozen’), and meiyi3yu2an2 (美元; ‘US dollar’), and
7. Activity measure words, such as quan2 (拳; ‘punch’), quan1 (圈; ‘lap’), xia4 (下; ‘time’), and bia4 (遍; ‘time’).

Among the 427 measure words collected in the dictionary, 174 can be used as general measure words.

General measure words include unit classifiers (e.g., ben3 (本) and zhili1 (支) and collective classifiers (e.g., qun2 (群) and shu4 (束)). Unit classifiers are the paradigm type of Chinese classifiers. They are used for individuation or enumeration of structurally or functionally self-contained things perceived as equivalent or similar, as in examples (1)-(3), given in the first section of this paper.

Chinese unit classifiers categorize nominals into semantic groups. By the same token, quantifying collectives may also have the feature of semantic categorization—as in ye wo xiao zhu (一窩老鼠; ‘a litter of mice’), yi wo laoshu (一窩小豬; ‘a litter of piglets’), and yi wo xiaogou (一窩小狗; ‘a
litter of puppies')—hence the name collective classifiers. A unit classifier and its succeeding noun form a more tightly bound constituent in Chinese. The particle de5 (的) cannot be inserted between a unit classifier and the succeeding noun. Thus we don’t have yi ben de shu (*一本的書; ‘a book’). This could indicate that Chinese unit classifiers have been grammaticalized from free noun morphemes and, accordingly, cannot occur as the first noun in the associative phrase construction ‘N + de + N.’ But most collective classifiers can take the particle de5 (的), as in yi wo de xiao gou (*我的小狗; ‘a litter of puppies’). Other than that, the borderline between Chinese unit classifiers and collective classifiers is not clear. Mandarin Chinese Daily News Dictionary of Measure Words [11] places unit classifiers and what we call collective classifiers in the same category, named ‘general measure words.’ In the dictionary ‘general measure words’ are described as the most typical and most common type of measure words in Chinese. Given that both unit classifiers and collective classifiers may show the sub-class to which their collocating nouns belong, it is not untenable to combine the two classes of Chinese measure words into one category.

In the dictionary there are 35 event measure words, which enumerate or individuate the occurrence of events. Since event measure words also indicate the semantic feature(s) through which their collocating nouns are categorized—as in yi bo tiaozhan (一波挑戰; ‘a wave of challenge’), yi bo zhanhuo (一波戰火; ‘a wave of war’), and yi bo kangzheng (一波抗爭; ‘a wave of demonstration’) event measure words may as well be treated as classifiers. Although event classifiers and general classifiers are both a subset of Chinese measure words, about a dozen Chinese classifiers collocate with not only event-denoting but also entity-denoting nouns. In other words, these classes fit into two categories: event classifiers and general classifiers, as in yi men dapao (一門大砲; ‘a piece of artillery’). In addition, it is possible for the same noun to collocate with an event classifier or general classifier, as in yi qí mousha-an (一窩的小狗; ‘a murder case’).

Furthermore, there are 26 approximation measure words in the dictionary. Unable to be preceded by numerals other than yi (一; ‘one’), zheyi (這; ‘this one’), and nayi (那; ‘that one’), approximation measure words denote approximate quantity. They also categorize their succeeding nouns— as in yi gu guaiwei (一般怪味; ‘a whiff of strange smell’), yi gu xiangwei (一般香味; ‘a whiff of perfume’) and hence can also be conceptualized as classifiers.

On the other hand, container measure words, categorical measure words, and standard measure words are not classifiers in that they usually do not specifically categorize their succeeding nouns. As to activity measure words—as in zou ta liang quan (揍他兩拳; ‘give him two punches’)—they do not precede a noun and, accordingly, are not classifiers either.

In a nutshell, Chinese classifiers include general measure words, event measure words, and approximation measure words, all of which categorize one class of co-occurring nouns or more.

### III. METAPHORICAL EXTENSION

I take a topic-vehicle approach to describing and analyzing metaphor involving Chinese classifiers. As far as its underlying conceptual structure is concerned, metaphor is a way of conceiving or presenting one thing or one state of affairs in terms of another (cf. Black [5], Ortony [24], Richards [25], Shie [29], Shie [31]). In the remainder of this article, I shall refer to the former as ‘theme’ and the latter as ‘vehicle’ for convenience. Thus a theme is viewed or presented in terms of a vehicle in the metaphorical thought. There exists more or less metaphorical analogy between the theme and the vehicle, as in yi mu wangshi (一幕往事; ‘a visualized scene of something in the past’), in which wangshi (往事; ‘something in the past’) is the theme and mu (幕; ‘a dramatic scene’) is the vehicle. Analogy is similarity, as of properties or functions, between two unlike things that are otherwise not comparable. Metaphorical analogy highlights similarity (as between ‘a dramatic scene’ and the ‘visualized scene of something in the past’), ignores contrasts (as between a real scene and a visualized one), and suppresses the attributes of the vehicle that are not concordant with the textual and situational context (e.g., A dramatic scene is three-dimensional).

A metaphor may reside in a classifier phrase. The head noun may be metaphorically individuated or quantified in terms of the classifier. In other words, such metaphorical extension occurs syntagmatically, in which case the classifier serves as the vehicle and the succeeding noun is the metaphorical theme. The relationships that linguistic units have with other units are syntagmatic if they occur together in a sequence (cf. Richards et al. [26]). Metaphorical extension is shown to be syntagmatic in each of the following examples, in which the head noun is presented in terms of the classifier vehicle:

(4) yi dai qingsi (*一帶清溪; ‘a CL (tube) clear stream’)
(5) yi lun mingyue (*一幕明月; ‘a CL (wheel) brilliant moon’)
(6) yi ju pengquan (*一條噴泉; ‘a CL (column) fountain’)
(7) yi jie biaochuan (*一葉扁舟; ‘a CL (tube) flat boat’)
(8) yi juan riguangdeng (*一簇日光燈; ‘a CL (tube)
Fluorescence lamp’

(9) yi dao caihong (一道彩虹; ‘a CL (road) rainbow’)

It is well-known that shape is a common factor that determines the use of Chinese unit classifiers. For one thing, the classifier gen1 (根) is used with nouns in reference to long or saliently one-dimensional objects, as in yi gen xiangyen (一根香煙; ‘a CL cigarette’). When it comes to the classifier mian4 (面), the succeeding noun is a flat or saliently two-dimensional object, as in yi mian jingzi (一面鏡子; ‘a CL mirror’). By the same token, the formal features of shape and configuration form a basis of metaphorical extension of some unit classifiers, as exemplified in (4)-(9).

Many bound classifier morphemes have been grammaticalized from free noun lexemes (cf. Loke [20]). In fact, all the classifiers in (4)-(9) still have a homographic and homophonous morpheme in nouns, as in daizi (帝子; ‘ribbon’), lunci (輪子; ‘wheel’), zhuzi (柱子; ‘column’), and the like. A useful test for such syntagmatic extension of metaphor as in (4)-(9) is whether the classifier and the succeeding noun can be used in the following form of metaphorical statement: ‘the succeeding noun + is/are + a noun containing the classifier morpheme.’ Where it is possible to do this, the classifier and the succeeding noun in the noun phrase are in semantic apposition and there is syntagmatic extension from the classifier to the succeeding noun, as shown in the following:

1. Metaphorical classifier phrase: yi yeh bianzhou (一葉扁舟; ‘a CL (leave) flat boat’)
2. Metaphorical statement: bianzhou shi yi piaoyezi (扁舟是一片葉子; ‘The flat boat is a leave’)

Another type of syntagmatic extension involves approximation classifiers—such as dui1 (堆), gu3 (穀), dian3 (點), and xian4 (綫)—which give a rough indication of the quantity of something their succeeding noun denotes. Approximation classifiers may be used to individuate something perceived or something abstract, serving as the vehicle of the metaphorical extension from concrete size to abstract quantity or degree, evident in the following phrases:

(10) yi ba nianji (一把年紀; ‘a CL (handful) age’)
(11) yi dui fannao (一堆煩惱; ‘a CL (heap) worry’)
(12) yi yuan luan (一團亂; ‘a CL (large lump) mess’)
(13) yi mo qingxiang (一抹清香; ‘a CL (wisp) delicate fragrance’)
(14) yi dian yali (一點壓力; ‘a CL (speck) stress’)
(15) yi xi xiang (一種希望; ‘a CL (silk) hope’)

The entity or state of affairs each of the head nouns in (10)-(12) denotes is individualized in terms of a classifier connoting a large or considerable size. The phrase yi dui shu (一堆書; ‘a heap of books’) means a group of books placed one on top of another. But under normal situation yi dui fannao (一堆煩惱; ‘a heap of worry’) cannot be interpreted in the same way. In this case, the meaning of the classifier dui (堆) has been extended from large group size to large quantity or degree on the ground that ‘a heap of books’ refers to a considerable group of material things and ‘a heap of worry’ to a considerable quantity or degree of mental feeling, which forms the basis of metaphorical analogy we have discussed previously—Metaphorical analogy is similarity between two unlike things that are otherwise not comparable. On the other hand, the classifiers in (13)-(15) are used to present a small amount or low degree through similar metaphorical extension. It is noticeable that the syntagmatic extension to quantity or degree may turn a general classifier into an approximation classifier, as can be seen from liang dian shudi (兩點水滴; ‘two CL water drops’) and yi dian qian (一點錢; ‘a little money’). The resulting approximation classifier does not have the enumerating function any longer, and accordingly, cannot follow numerals other than yi (一; ‘one’), zheiyi (這一; ‘this one’), and nayi (那一; ‘that one’).

In many cases, metaphorical extension arises paradigmatically between two succeeding nouns of the same classifier. A figurative extension may be said to be paradigmatic if it arises between two juxtaposed linguistic units rather than between two units in a natural sequence. In a metaphorical pair of paradigmatically extended classifier phrases, one succeeding noun can be interpreted as the metaphorical theme and the other succeeding noun implicates the vehicle. The common classifier indicates the analogy between the theme and the vehicle, evident in the following phrases:

(16) a. yi duo hua (一朵花; ‘a CL flower’)
   b. yi duo weixiao (一朵微笑; ‘a CL smile’)
(17) a. yi zhen qiangfeng (一陣強風; ‘a CL strong wind’)
   b. yi zhen jutong (一陣劇痛; ‘a CL severe pain’)
(18) a. yi mei huojian (一枚火箭; ‘a CL rocket’)
   b. yi mei duzhen (一枚毒針; ‘a CL poisonous needle’)
(19) a. yi fu tuhua (一幅畫; ‘a CL painting’)
   b. yi fu meijing (一幅美景; ‘a CL beautiful scenery’)
(20) a. yi dao weiqiang (一道圍牆; ‘a CL wall’)
   b. yi dao pingzhang (一道保護屏; ‘a CL protective screen’)
(21) a. yi bo langhua (一波浪花; ‘a CL wave’)
   b. yi bo gongshi (一波攻擊; ‘a CL attack’)

In (16) the two succeeding nouns hua (花; ‘flower’) and weixiao (微笑; ‘smile’) are metaphorically related in virtue of the similarity of property between them: they are beautiful or conducive to happiness. With reference to (17), the classifier zhen4 (陣) indicates the metaphorical analogy between
qiangfeng (強風; 'strong wind') and jutong (劇痛; 'severe pain'), both of which happen suddenly and last for a certain length of time. Much the same can be said of (18)-(21).

Quite a few linguists (e.g. Aitchison [1], Burling [6], Lakoff [14], Lee [17], Rosch [28]) analyze linguistic and conceptual categorization in terms of prototypes. A category has prototypical members, and other members may be assimilated into the category by virtue of cognitive extension has prototypical members, and other members may be assimilated into the category by virtue of cognitive extension from prototypical members. Prototype theory can explain the relationships between succeeding nouns of many Chinese classifiers. For example, there is a prototypical class of nouns that go with the classifier duan4 (段), including lu (路; 'road'), xiepuo (斜坡; 'slope'), hualianxian (海岸線; 'coastline'), shengzi (繩子; 'rope'), and zhugan (竹竿; 'bamboo pole'). From these prototypical members other members are derived, such as rizi (日子; 'days'), jingyen (經驗; 'experience'), hua (話; 'remarks'), chayu (差異; 'disparity'), lishi (歷史; 'history'), and lianqing (愛情; 'love affair'). It is obvious that the non-typical members are related to the prototypical ones through a metaphorical extension from a spatial stretch of something to a temporal or abstract expanse.

According to my corpus, there are 39 Chinese collective classifiers, which are primarily used to enumerate or individuate groups of entities, such as qun2 (群; 'a CL (head) ox'), pai2 (排), quan1 (圈), duai4 (對), and die2 (對). The meanings of Chinese collective classifiers are seldom extended paradigmatically. But the classifiers for a disparaged group of people are exceptions, including bang1 (幫; 'help'), piao4 (票), huo3 (伙), cuo1 (撮), and wol1 (窩). The classifier wol1 (窩) is prototypically for a litter or brood of animals. And yet it also applies to villains like tufei (土匪; 'bandits') and qiangdao (強盜; 'robbers'). And the prototypical nouns that bang1 (幫), piao4 (票), huo3 (伙), and cuo1 (撮) take are all evildoers. These classifiers can all be used to refer to a group of people who do not cause harm or suffering to others but merely behave in a way the speaker does not approve of but could find it difficult to be really critical of, as in yi bang xiaohuozi (一幫小夥子; 'a CL (small) friends') and yi piao pengyu (一票朋友; 'a CL friends').

IV. METONYMICAL EXTENSION

In the literature (e.g. Beard [3], Hicks [10], Kennedy and Gioia [12], Lazar [16], Wales [35]) metonymy is usually described as the substitution of the name of one thing for the name of another closely related thing. The former may be called ‘vehicle’ and the latter ‘metonymical referent.’ The relationship between the two is based on association (cf. Coulson [8], Mufin and Ray [22], Stockwell and Minkova [32], Thornborrow and Wareing [34]). In order to clarify the fuzzy concept of metonymical association, Shie [30, 31] has proposed 20 metonymic schemas, including ‘part for whole or vice versa,’ ‘genus for species,’ ‘material for object,’ ‘property for entity,’ ‘place for people,’ ‘container for content,’ ‘symbolic association,’ ‘body part for faculty,’ ‘instrument for effect/result,’ and ‘trademark for product.’ For example, the classifier phrases yi zhi qiubang (一支球棒; 'a CL bat') and yi zhi anda (一支安打; 'a CL hit) are related metonymically and the association is between an instrument (a bat) and the result of using the instrument to strike the ball (a hit).

According to my data, 18 Chinese unit classifiers are metonymically related to their succeeding nouns via the metonymic association of a part with the whole, among them ba3 (把; 'handle'), tou2 (頭; 'head'), zhi1 (枝; 'twig'), jie2 (節; 'joint'), ding3 (頂; 'top'), and jia4 (架; 'frame'). Such a classifier is the metonymic vehicle through which the succeeding noun is individuated or quantified, as in:

(22) yi ba dao (一把刀; 'a CL (handle) knife')
(23) yi tou niu (一头牛; 'a CL (head) ox')
(24) yi zhi taohua (一根桃花; 'a CL (twig) peach blossom')
(25) yi jie ganzhe (一節甘蔗; 'a CL (joint) sugarcane')
(26) yi ding zhengpang (一個攤蓬; 'a CL (top) tent')
(27) yi jia feiji (一盤棋; 'a CL (game) airplane')

Spatial association may also be identified in Chinese classifier phrases. Some classifiers mark the place where the referent of their succeeding noun is located. Two classifiers (chu4 處 and suo3 所) simply mean ‘places’ or ‘locations.’ Spatial association of a classifier with its succeeding noun is illustrated by the following examples, in which entities or phenomena are associated with their locations:

(28) yi zhao jiujiu (一桌酒席; 'a CL (table) feast')
(29) yi shen lenghan (一身冷汗; 'a CL (body) cold sweat')
(30) yi chu daoshang (一頂帳蓬; 'a CL (place) knife wound')
(31) yi suoxiaoxiao (一所學校; 'a CL (location) school')
(32) yi pan qi (一盤棋; 'a CL (board) chess')
(33) yi fang xinfu (一家媳婦; 'a CL (house) wife/daughter-in-law')

Some other classifiers are linked with their succeeding nouns through the metonymic schemas of ‘material for object,’ ‘property for entity,’ or ‘body part for faculty,’ as in the following:

(34) yi zhi gongwen (一張公文; 'a CL (paper) official correspondence')
(35) yi tie zhongyao (一帖中藥; 'a CL (prescription paper) medicine')
(36) yi zun foxiang (一尊佛像; 'a CL (respect) image of Buddha')
(37) yi quan lianyi (一圈漣漪; 'a CL (circle) ripple')
The classifier schema of 'instrument for result.' And the extension is deal'). Thus the metonymic association is based on the

other grammatical categories had been established (Loke [20], Classifiers came into Chinese grammar well after the

People also use a pen to enter up an account; therefore, (bi3 common noun 'pen') was a common noun first and then evolved into a word

so forth. The same is true of (can also serve as a classifier for zhang

nouns of quite a few Chinese classifiers are metonymically

First of all, since smells are carried in the air, they may also be individuated by the classifier gu3 (acetone, as in yi gu kafei xiang (a sweet aroma of coffee) and yi gu yu qwei (a smell of fresh paint)). Second, the morpheme qi (air) combines with the morpheme li (force) to form the noun qili (force); dongli (motive force); sili (willpower); shili (momentum); and the like. Third, qi (air) symbolizes feeling, as can be seen in the following expressions: shengqi (be angry); paiqi (temper); duqi (be in a mood); xieqi (feel discouraged); and jinwei (lose heart). Consequently, the classifier gu3 (acetone) can individuate nouns like nuqi (anger); yongqi (courage); jiaoqi (arrogance); xiqi (joy); yuanqi (grievance); xingfen (excitement); jiating (passion); jian-ao (arrogance); and suffered, and beyond.

Finally, the Chinese concept of qi (air; 'air') entails temperament and atmosphere. As such, the succeeding nouns of the classifier gu3 (acetone) include qichi (temperament); xieqi (evil temperament); jiaqizi (youthful spirit); qifen (atmosphere); qishi (naivety); qinei (youthfulness); qixiang (youthfulness); and langman (romance). In a word, succeeding nouns of the classifier gu3 (acetone) are related through symbolic association. Other examples of symbolic association are as follows: (53) a. yi ke xin (a CL heart)

For example, the noun zuopin (works) can be used with

The classifier gu3 (acetone) may be used with the noun qi4 (air). From the classifier phrase yi gu qi (acetone; 'a CL air'), many other succeeding nouns of the classifier are derived metonymically. First of all, since smells are carried in the air,
the following classifiers: jian4 (件), pian1 (片), shou3 (首), zhang1 (张), bu4 (部), and dong4 (栋). Different classifiers can define the referent or narrow down the scope of possible referents of the succeeding noun. The phrase yi dong zuopin (一部作品; ‘a CL work) refers to a building, while yi bu zuopin (一部作品; ‘a CL work’) means a movie, a book, or a set of books, depending on the context.

The trademark-for-product association can also be found in Chinese classifier phrases, as in:
(55) yi gen xinleyuan (一根新樂園; ‘a CL New Paradise’)  
(56) yi liang binshi (一辆賓士; ‘a CL Mercedes’)  
(57) yi jia boyin (一架波音; ‘a CL Boeing’)

In (55), xinleyuan (新樂園; ‘new paradise’) is a cigarette trade name popular in Taiwan some 30 years ago. As a matter of fact, metonymic extension is a very complicated linguistic phenomenon. Many schemas of metonymy have been presented in the literature (as in Koveces [13], Lakoff and Johnson [15], Shie [30]). And yet they cannot cover all the instances of metonymic extension of Chinese classifiers. For example, we can speak of yi zhi dianhua (一支電話; ‘a telephone’) and yi zhi haoma (一支號碼; ‘a telephone number’). The two succeeding nouns are obviously related metonymically. But I have found that none of the existing metonymic schemas can cover such a metonymic usage of classifier. However, the metonymic schemas discussed in this section are capable of accounting for the overwhelming majority of metonymic extensions of Chinese classifiers.

V. THE RANGE OF FIGURATIVE EXTENSION

Conventional figurative extension is quite active in Chinese classifier phrases. According to my own careful calculation, of the 190 classifiers listed in Appendix, as many as 125 (65.8%) have one or more established figurative meanings or usages. The minority of classifiers out of the range of conventional figurative extension include the following three notable types:
1. highly grammaticalized classifiers like ben3 (本), pil1 (片), ge5 (格), and wei4 (位), which have little lexical semantics,  
2. archaic classifiers like sheng4 (生), zhu4 (注), ding4 (定), and que4 (啣), and  
3. collective classifiers, especially those expressing the arrangement of a group of related entities, such as pai2 (排), die2 (列), lie4 (列), and zha2 (隊).

The numbers of metaphorically and metonymically extended classifiers are presented in Table 1.

<table>
<thead>
<tr>
<th>Classifier Type</th>
<th>Metaphoric</th>
<th>Metonymic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntagmatic</td>
<td>25</td>
<td>62</td>
<td>87</td>
</tr>
<tr>
<td>Paradigmatic</td>
<td>47</td>
<td>31</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>93</td>
<td>165</td>
</tr>
</tbody>
</table>

As Table 1 shows, there are more Chinese classifiers with metonymically extended meanings or usages than with metaphorically extended ones. And the metaphorical meanings or usages of classifiers tend to be derived paradigmatically, while the metonymical ones tend to arise through syntagmatic extension.

VI. CONCLUDING REMARKS

In this article we have investigated figurative extension of Chinese classifiers in the context of classifier phrases. We have treated Chinese classifiers as measure words that categorize one class of co-occurring nouns or more in terms of salient perceptual properties of the denotations of the co-occurring nouns. We have found that figurative meanings or usages of Chinese classifiers are the products of syntagmatic or paradigmatic extension. It is obvious that Chinese classifiers combine with their succeeding nouns to form a phrasal construction that abounds with instances of figurative extension. This is a conspicuous feature of Chinese classifiers in contrast with other Chinese measure words. Extremely rare are instances of figurative extension of categorical measure words, container measure words, and standard measure words. Hopefully, this article has shed a little new light on our understanding of Chinese classifiers and can be helpful to teaching and learning classifiers in Chinese as a foreign language.

REFERENCES

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APPENDIX: CHINESE CLASSIFIERS

1. ba3 (把; for objects that has a handle or a handful of something)
2. bo1/po1 (波; for waves, unexpected turn of events, successive actions, etc.)
3. ban1 (班; for runs of buses, trains, flights, etc.)
4. ban4 (瓣; for petals, segments of a tangerine, garlic, etc.)
5. ben3 (本; for books, notebooks, magazines, photo albums, etc.)
6. bang1 (帮; for a row of people, objects, etc.)
7. ban4 (伴; for schools of thought, different political forces, competing theories, sects, etc.)
8. ban4 (伴; for runs of buses, trains, flights, etc.)
9. ban4 (伴; for tools with a handle)
10. bu4 (部; for machines, vehicles, movies, plays, dictionaries, works, etc.)
11. pai4 (排; for a row of people, objects, etc.)
12. pai4 (排; for a row of people, objects, etc.)
13. pai2 (排; for a row of people, objects, etc.)
14. pai2 (排; for a row of people, objects, etc.)
15. pai2 (排; for a row of people, objects, etc.)
16. pai2 (排; for a row of people, objects, etc.)
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32. pai4 (排; for a row of people, objects, etc.)
33. pai4 (排; for a row of people, objects, etc.)
34. pai4 (排; for a row of people, objects, etc.)
35. pai4 (排; for a row of people, objects, etc.)
36. pai4 (排; for a row of people, objects, etc.)
37. pai4 (排; for a row of people, objects, etc.)
38. fu4 (付; for a set or pair of things, a specific facial expression, etc.)
39. fu4 (付; for a set or pair of things, a specific facial expression, etc.)
40. dai4 (代; for a generation of people, etc.)
41. dai4 (代; for a ribbon-like scene, view, etc.)
42. dao4 (道; for dishes, doors, walls, procedures, orders, long and narrow things, rays of light, etc.)
43. dang3 (幢; for stocks, drama, exhibitions, etc.)
44. dang4zi5 (幢子; for a matter or an affair)
45. di1 (滴; for drops of liquid)
46. die2 (滴; for a wad of things)
47. dian3 (點; for items, dots, moles, freckles, etc.)
48. ding3 (頂; for objects that has a top)
49. ding4 (釘; for silver used as currency or Chinese ink sticks)
50. du3 (堵; for walls)
51. duo3 (垛; for flowers, mushrooms, clouds, etc.)
52. dui1 (垛; for a heap of things or substance)
53. dui4 (垛; for a team of people)
54. dui4 (對; for a pair of persons, animals, or objects)
55. duan4 (段; for sections of something long and thin, stretches of language, lengths of a continuum, etc.)
56. dun4 (段; for a stretch of discourse, a specific sight, etc.)
57. duong4 (棟; for buildings)
58. tai1 (胎; for a litter of animals)
59. tai2 (台; for machines, vehicles, or traditional opera)
60. tao4 (套; for suits of clothes, standards, systems, strategies, plans, methods, thoughts, etc.)
61. tou2 (頭; for big 4-legged animals)
62. tan1 (摊; for a pool or puddle of liquid)
63. tang2 (趟; for trips)
64. tang4 (趟; for trips)
65. tie1/tie4 (題; for exam questions)
66. tie1/tie4 (題; for prescriptions of Chinese medicine or doses of Chinese herbal medicine)
67. tiao3 (條; for long and thin things, often flexible, etc.)
68. ting3 (銅; for machine guns)
69. tuo2 (坨; for a roundish or cone-like lump of substance)
70. tuan2 (團; for balls or lumps of something)
71. tong1 (通; for phone calls or telegrams)
72. lan2 (欄; for columns of words, figures, etc.)
73. li4 (粒; for small things like grains, seeds, pills, etc.)
74. lie4 (列; for trains or train cars)
75. liu3 (绺; for a small bunch of hair)
76. lian2 (聯; for a set of stamps, tickets, etc.)
77. liang4 (軸; for vehicles)
78. lu4 (路; for a route or a group of people)
79. lun2 (輪; for talks, rounds of a game, match, etc.)
80. lu3 (路; for a brigade)
81. lu3 (路; for a wisp of smoke, smell, hair, etc.)
82. ge5 (個; general classifier)
83. gan1 (干; for a group of criminals or ill-behaved people)
84. gen1 (根; for hair, stick-shaped objects, etc.)
85. gu3 (根; for thread, power, trends, currents, floods, etc.)
86. gua4 (根; for a string of things that can be hung up)
87. guan3 (管; for hollow, tube-shaped objects)
88. ke4 (客; for servings of food)
89. ke4 (客; for something learned or to be learned in a lesson)
90. ko5 (穎; for small and roundish things)
91. kuai4 (倉; for a pile of objects)
92. kuai4 (倉; for an episode of a book)
93. kou3 (口; for pieces of something solid, thin and flat things, patches of something on a plane or surface, etc.)
94. kun3 (捆; for a bundle of things)
95. hang2 (行; for a line or row of people, objects, etc.)
96. hu4 (戶; for houses or households)
97. huo3 (伙; for a disparaged group of people)
98. huo3 (伙; for a group of criminals or ill-behaved people)
99. hui2 (會; for occasions of a recurring action or event)
100. ji2 (級; for a step in a flight of stairs)
101. ji2 (級; for an episode of a book, play, etc.)
102. ji2 (級; for an episode of a book)
103. ji4 (級; for slaps in the face, punches, strikes, etc.)
104. ji4 (級; for injections or doses of Chinese medicine)
105. jia1 (家; for households, residences, or institutions)
106. jia4 (架; for an aircraft or a machine)
107. jie1 (階; for a step in a flight of stairs)
108. jie2 (節; for train cars, lengths or sections of something long, quarters of a game, etc.)
109. jie2 (節; for sections of long things)
110. jie4 (節; for yearly meetings or activities, graduation classes, etc.)
111. jian3 (卷; for rooms, buildings, or institutions)
112. jian4 (件; for clothes, works, events, etc.)
113. jing1 (景; for a hair)
114. ju2 (局; for an inning or set of a game)
115. ju4 (局; for sentences)
116. ju4 (具; for apparatus, corpses, or coffins)
117. jua4 (卷; for rolls or reels of something)
118. jua4 (卷; for books)
119. qi2 (畦; for rectangular pieces of farmland)
120. qi2 (期; for issues of a magazine, phases of a project, etc.)
121. qi3 (起; for accidents, cases, etc.)
122. qiang1 (強; for emotions, ideals, etc.)
123. qu3 (曲; for a song or music)
124. quan1 (圈; for something circular, circular motions, laps, etc.)
125. qu4 (曲; for a type of Chinese poetry written to tunes)
126. qun2 (群; for a group of people, animals, etc.)
127. xi2 (席; for talks, members of an assembly or committee, etc.)
128. xian4 (线; for lanes, telephone lines, or something long and thin)
129. xiang4 (項; for opinions, demands, agreements, proposals, decisions, orders, measures, plans, premises, principles, costs, tasks, inventions, nominations, features, recognitions, operations, factors, etc.)
130. xing2 (行; for a group of traveling people)
131. zhi1 (支; for teams, songs, dance, long and thin objects, etc.)
132. zh1/zhi3 (只; for containers, utensils, etc.)
133. zhi1 (枝; for sprays of flowers or leaves, long and thin objects, etc.)
134. zhi1 (枝; for animals, vessels, containers, utensils, etc.)
135. zhi3 (紙; for documents)
136. zhi2 (紙; for a pack or wad of things)
137. zhi4 (指; for a move of martial arts, method, strategy, etc.)
138. zhong4 (種; for scrolls of Chinese painting)
139. zhan3 (詹; for lamps)
140. zhen1 (振; for injections)
141. zhen4 (陣; for sudden phenomena)
142. zhong1 (仲; for things that has a flat surface or can be opened or spread)
143. zhong4 (種; for paintings, photos or certificates of merit)
144. zhu1 (株; for plants)
145. zhu4 (柱; for a column-like object or phenomenon)
146. zhu4 (炷; for burning joss sticks)
147. zhu1 (柱; for the food and drink on a table, the guests around a table, 4 people playing mahjong, etc.)
148. zhuo1 (桌; for moves at chess)
149. zhuang1 (壯; for events, cases, business deals, etc.)
150. chang3 (場; for sporting events, entertainment activities, calamities, dreams, war, games, etc.)
151. chu1 (専; for drama, movies, etc.)
152. chu4 (處; for locations, venues, errors, wounds, households, parking lots, shopping centers, baseball fields, historic sites, woods, etc.)
153. chuan2 (毯; for quilts, blankets, etc.)
154. chuan4 (織; for a string or cluster of things)
155. chuang2 (幢; for buildings)  
156. chong2 (重; for meanings, layers of substance, etc.)  
157. shou3 (手; for skills manifested mainly through hands)  
158. shou3 (首; for music, songs, or poetry)  
159. shan4 (扇; for doors, windows, or screens)  
160. shen1 (身; for a suit of clothes being worn, skills in martial arts, etc.)  
161. sheng1 (聲; for voices or sounds)  
162. sheng4 (乘; for war chariots)  
163. shu4 (束; for a bunch or sheaf of things)  
164. shuang1 (雙; for a bunch of hair, noodles, bad guys, etc.)  
165. ren4 (任; for terms of office)  
166. ze2 (則; for self-contained pieces of writing)  
167. zu3 (組; for a group of people or a set of photos, figures, works, etc.)  
168. zuo3/cuo1 (撮; for a bunch of hair, noodles, bad guys, etc.)  
169. zuo4 (撮; for trophies, prizes, statues, stages, buildings, bridges, swimming pools, reservoirs, cities, mountains, islands, woods, etc.)  
170. zun1 (尊; for statues or cannons)  
171. cong2 (叢; for a clump of plants)  
172. ci4 (次; for occasions of a recurring action or event)  
173. ce4 (冊; for books, magazines, etc.)  
174. can1 (餐; for meals)  
175. ceng2 (層; for stories of building, coats/sheets of something, etc.)  
176. cu4 (簇; for a bunch or clump of plants)  
177. cong2 (叢; for a clump of plants)  
178. si1 (絲; for a thread-like thing, a subtle feeling, etc.)  
179. sao1 (艘; for bigger vessels)  
180. suo3 (所; for institutions)  
181. ye4 (頁; for a page of text, information, etc.)  
182. ye4 (葉; for a small boat)  
183. wo1 (窩; for a litter or brood of animals or a disparaged group of people)  
184. wei3 (尾; for fish or shrimps)  
185. wei4 (位; a polite classifier for people)  
186. wei4 (味; for medical herbs, small dishes, or ingredients)  
187. wan1 (灣; for a crescent moon, a stream of water, etc.)  
188. wan1 (灣; for a stream of water)  
189. wan2 (丸; for boluses of medicine)  
190. yuan2 (員; for high-ranking military officers, baseball hitters, etc.)