Diagnostics for count classifiers versus massifiers in Chinese:
A review and provocation[*]

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1. Review

Cheng and Sybesma (1998, 1999) claim that classifiers in Mandarin Chinese can be grouped into two types based on their syntagmatic properties. The first type, which they call (count) classifiers, may not be preceded by adjectives nor followed by the functional element *de*, whereas the second type, which they call massifiers, may be preceded by adjectives and followed by *de*. The full set of examples cited by Cheng and Sybesma (1998, 1999) to support these claims is given in Table 1 (identified by the example numbers in the 1998 paper).[1]

Table 1a. Cheng and Sybesma's syntagmatic diagnostics applied to count classifiers

Classifier type	Adjective context	*de* context
Count classifier	(7a) *yi da zhi gou one big CL dog	(4a) ba tou (*de) niu eight CL-head DE cow 'eight cows'
	(7b) *yi da wei laoshi one big CL teacher	(4b) jiu gen (*de) weiba nine CL DE tail 'nine tails'
		(4c) shi zhang (*de) zhuozi ten CL DE table 'ten tables'
	(8b) *san da ge ren three big CL people	(8a) *san ge de ren three CL DE people

Table 1b. Cheng and Sybesma's syntagmatic diagnostics applied massifiers

Classifier type	Adjective context	*de* context
Massifier	(5a) yi da zhang zhi one big CL-sheet paper 'one large sheet of paper'	(3a) san bang (de) rou three CL-pounds DE 'three pounds of meat'
	(5b) na yi xiao xiang shu that one small CL-box book 'that one small box of books'	(3b) liang xiang (de) shu two CL-box DE book 'two boxes of books'
	(9b) yi da qun ren one big CL-crowd people 'a big crowd of people'	(9a) yi qun de ren one CL-crowd DE people 'a crowd of people'
	(10a) san da wan de tang three big CL-bowl DE soup 'enough soup for three big bowls'	(10a) san da wan de tang three big CL-bowl DE soup 'enough soup for three big bowls'
	(10b) liang da bei de shui two big cup DE water 'enough water for two big cups'	(10b) liang da bei de shui two big cup DE water 'enough water for two big cups'

These claimed diagnostics have had great influence. According to Google Scholar (scholar.google.com), as of February 7, 2011 Cheng and Sybesma (1998) has been cited by 65 works and Cheng and Sybesma (1999) by 345. The examples from Cheng and Sybesma (1999) illustrating the adjective and *de* claims are quoted uncritically as recently as Gebhardt (2011).

However, as has been pointed out repeatedly in the Chinese syntactic literature, both claims are false. Regarding the first claim, Cheng and Sybesma (1998) themselves acknowledge that adjectives do often appear before count classifiers (footnote 4, p. 390):[2]

> One of the exceptions is *ben* 'volume' as in *yi da ben shu* /one big volume book/ 'a big book', but it may be the case that *shu* means 'writing' rather than 'book'. Another interesting case is *tiao* when it is used as the classifier for fish: *yi da tiao yu* /one big CL fish/ 'a big fish' is fine. Is 'fish' just seen as one (edible) mass? More difficult to explain is *yi chang bu yingpian* /one long CL film/ 'a long movie'. The same applies to *yi xiao duo huar* /one small CL flower/ 'a small flower' and *yi da zhang ditu* /one big CL map/ 'a big map'. It should be noted however that some speakers do not consider it grammatical to have classifiers such as *tiao*, *bu*, and *duo* co-occurring with an adjective such as *da* 'big' and *xiao* it [sic] 'small'.

Further examples of adjectives preceding count classifiers are cited in works written in English by Tang (2005), Yang (2005), Hsieh (2008), Her and Hsieh (2010), Liu (2010), Li (2010), and Zhang (2011), and in works written in Chinese by Zhu (1982), Lu (1987), and Luo (1988).[3]

The other syntagmatic claim has been falsified as well. Examples of *de* following count classifiers are cited in Hsieh (2008), Li (2010), Her and Hsieh (2010), and Zhang (2011).

Table 2 presents all counterexamples to both claims cited in the summary of Zhang (2011),

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[2] No such caveat appears in the much better cited Cheng and Sybesma (1999).
[3] Lu (1987) is cited in Cheng and Sybesma (1998), but no mention is made of the fact that it consists primarily of long lists of adjective + count classifier examples.

section 2.7.4. Example (106b) is based on one of the many in Li (2010:201-203), and examples (108a-b), which violate both claims simultaneously, come from Her and Hsieh (2010:541).

Table 2. Violations of the syntagmatic claims about count classifiers

Violations of the adjective test	Violations of the *de* test
(104c) yi da tiao hao-han one big CL good-guy 'one big good guy'	(106a) Shufen chi-le yi-bai ge de pingguo. Shufen eat-PRF one-hundred CL DE apple 'Shufen ate 100 apples.'
(104d) san da zhi laohu three big CL tiger 'three big tigers'	(106b) Shufen chi-le san-fen-zhi-yi li de ganmao-yao. Shufen eat-PRF one-third CL DE cold-pill 'Shufen took one third of a cold pill.'
(104e) san chang tiao xianglian three long CL necklace 'three long necklace'	(106c) Yi liang tiao de maojin ni zong mai-de-qi ba! one two CL DE towel you after.all buy-can PRT 'You should be able to afford to buy one or two towels!'
(108a) yi da ke de gaolicai one big CL DE cabbage 'one big cabbage'	(108a) yi da ke de gaolicai one big CL DE cabbage 'one big cabbage'
(108b) yi da tiao de yu one big CL DE fish 'one big fish'	(108b) yi da tiao de yu one big CL DE fish 'one big fish'

Hsieh (2008) also cites acceptable-sounding violations of the syntagmatic claims from corpora. Non-Chinese-speaking readers who want to get a first-hand feel for the naturalness of these violations can adopt a similar strategy. Simply copy and paste the character strings in Table 3 (including quotation marks) into a search engine, and ask a Chinese native speaker to help filter the results. Very likely the consultant will be able to suggest further search terms to try, or even come up with counterexamples spontaneously.

Table 3. Search strings to collect more violations of the syntagmatic claims

Violations of the adjective test	Violations of the *de* test
"兩大隻狗" liang da zhi gou two big CL dog	"一百个的苹果" yi-bai ge de pingguo one hundred CL DE apple
"两大粒药丸" liang da li yaowan two big CL pill	"兩張的桌子" liang zhang de zhuozi two CL DE table

Readers who are feeling particularly ambitious could also run a quick acceptability judgment experiment with the help of Chinese-speaking colleagues, students, or their acquaintances; instructions on how to design, run, and analyze such small-scale judgment experiments are given in Myers (2009). I estimate that to get significant results, only eight to eleven speakers will be needed (one linguist to help design the materials, seven to ten naive speakers to complete the judgment surveys).

In any case, both of the syntagmatic claims of Cheng and Sybesma (1998, 1999) have already been falsified, repeatedly. Perhaps there are trends in the claimed directions (i.e.

classifiers that disfavor adjectives also tend to disfavor *de*), but the claims certainly cannot be used as clear-cut diagnostics for classifying Chinese classifiers.

2. Provocation

  The lessons of this review are simple. First, if you are not a native speaker of a language, you should do your homework before repeating claims that you found in a single paper. Use your library skills to find out if anybody has cited your source in a critical way. Consult native-speaking colleagues and students for their judgments and literature recommendations. These points apply not just to authors, but to journal reviewers and editors as well.
  Second, if you are a native speaker of a language other than English and are disturbed by faulty descriptions of your language in the English literature, don't hide your objections in locally distributed venues that English-speaking linguists are unlikely to stumble upon. Instead, submit a squib or reply to *Linguistic Inquiry* or other prominent journal; at the very least, you will give the reviewers and editors something to think about. Or email the relevant references and data to prominent non-Chinese-speaking authors who misdescribe your language and beg them to help set the record straight. Or conduct a proper full-scale quantitative corpus analysis and/or acceptability judgment experiment and publish it in a prominent venue. Or, if you are in a hurry, just do what I did - post a brief, explicit refutation on LingBuzz.

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