Chinese Classifiers and Count Nouns

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Many linguists, philosophers, and anthropologists hold that classifier languages, including Chinese, Japanese, Korean, and Thai, have no count nouns, and that all their common nouns are mass nouns. This paper argues that Chinese draws a syntactic, as well as semantic, distinction between mass and count nouns, and suggests how the approach taken to clarify the distinction can be extended to other classifier languages.

Keywords: classifier, count noun, mass noun hypothesis, number, quantity, quantifier, measure word

1. Introduction

It is usual to distinguish common nouns into mass and count nouns. The distinction was first drawn by Otto Jespersen in The Philosophy of Grammar (1924, pp. 198ff & 200f), a work on the principles of grammar that focuses on English and some other related languages. The distinction in English and the like is closely related to the disparity between two kinds of numeral noun phrases (in short, NNPs) that can be found in those languages:

(1) a. three cows
    b. three liters of milk

The count noun cow, taking the singular or plural form, can combine
directly with numerals. It yields (1a) by combining with *three*. The mass noun *milk*, by contrast, cannot combine with numerals without the aid of *measure words*, e.g., *liter*. It yields (1b) by combining with *three* via *liter*. But some languages seem not to allow NNPs of the same structure as (1a). There are languages that use additional expressions called *(numeral) classifiers*\(^2\) in their translations of, e.g., (1a), which makes the translations draw a syntactic parallel to their translations of, e.g., (1b) (see Tables 1 & 2 in section 2). Such languages, called *classifier languages*, include Chinese, Japanese, Korean, Thai, and many other East and Southeast Asian languages. Many linguists, philosophers, and anthropologists appeal to this feature of classifier languages, together with a few other features that they seem to share, to hold the Mass *Noun Hypothesis:*\(^3\)

**Mass Noun Hypothesis:**

(MH1) Classifier languages have no count nouns.

(MH2) All the common nouns of classifier languages are mass nouns.

On their view, all the NNPs of those languages involve classifiers because their nouns, being mass nouns, *require* measure words to combine with numerals. This is now the standard view on classifier languages.

But I think it is a mistaken view based on superficial examinations of classifier languages. The linguistic distinction between mass and count nouns is closely related to the ontological distinction between *stuff* and *individuals*, and that between the *quantity* (i.e., amount) of stuff and *number* of individuals.\(^4\) Many studies of animals’ and human infants’ cognition of number suggest that humans conceive individuals and their numbers differently from stuff and its quantity without or before acquiring languages.\(^5\) More-

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\(^2\) See Aikhenvald (2003) for a survey on classifiers. I use *classifier* interchangeably with *numeral classifier*.


\(^4\) I use *quantity* interchangeably with *amount*. Note that quantity or amount pertains to individuals as well as stuff. Cows, as well as water, have weight and volume.

\(^5\) See Dehaene (1997, Part I) for a survey on the animal and human cognition of
over, some recent studies show that both English- and Japanese-speaking children, as early as when they are two years old, have a grasp of the stuff/individual distinction, and use it to learn the meanings of nouns (see Soja et al. (1990), and Imai & Gentner (1997)). And I think there is good linguistic reason to think that classifier languages, too, distinguish mass and count nouns. So I propose a conjecture opposite to the Mass Noun Hypothesis:

Count Noun Hypothesis:
(CH1) Classifier languages have count nouns as well as mass nouns.
(CH2) They have morphosyntactic devices for distinguishing count nouns from mass nouns.

This paper aims to support this hypothesis with a close scrutiny of Chinese.

2. Classifier Languages and the Mass Noun Hypothesis

Classifier languages, or many of them, share several features that some might take to support the Mass Noun Hypothesis. To get an idea of the grounds for the hypothesis, it is useful to note the devices commonly used to draw the distinction for English: (a) the grammatical number distinction (or the singular-plural morphology); (b) the indefinite article a/an; (c) many and much; few and little; (d) quantifiers: each, every, several, etc.; and (e) numerals: one, five, a score of, etc. Most of the above-mentioned devices have no counterparts in classifier languages, such as Chinese, Japanese, Korean, or Thai. (a*) These languages draw no grammatical number distinction. (b*) They have no articles. (c*) And they have no exact counterparts of many and much, which pertain to number and quantity, respectively. Instead they have one word that amounts to a lot: the Chinese henduo, Korean man(h)-, etc. Those words have the number/quantity duality, and cover both many and much. (And it is the same with their analogues of few and little.)
Moreover, nouns of classifier languages, it seems, cannot directly combine with numerals. Consider the following translations of *three cows* into the above-mentioned languages:

<table>
<thead>
<tr>
<th>Korean</th>
<th>Japanese</th>
<th>Chinese</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>so sey mali</em></td>
<td><em>ushi san tou</em></td>
<td><em>san tou niu</em></td>
<td><em>was saam tua</em></td>
</tr>
<tr>
<td>cow three CL</td>
<td>cow three CL</td>
<td>cow three CL</td>
<td>cow three CL</td>
</tr>
</tbody>
</table>

In addition to the counterparts of *cow* and *three*, these phrases have the classifiers that match nouns for animals: *mali* (Korean), *tou* (Japanese), *tou* (Chinese), and *tua* (Thai). This makes the translations of *three cows* draw syntactic parallels to the translations of, e.g., *three pounds of meat* into the same languages:

<table>
<thead>
<tr>
<th>Korean</th>
<th>Japanese</th>
<th>Chinese</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>kokи sey kun</em></td>
<td><em>niku san paundo</em></td>
<td><em>san bang (de) rou</em></td>
<td><em>ma saam pon</em></td>
</tr>
<tr>
<td>cow three pound</td>
<td>meat three pound</td>
<td>3 pound (DE) meat</td>
<td>meat three pound</td>
</tr>
</tbody>
</table>

For the classifiers used in the former take the positions of the measure words in the latter.

What does all this mean? Some argue that it supports the Mass Noun Hypothesis. They assume that the classifiers in the translations of *three*...
cows, like measure words, pertain to the measurement of the quantity of stuff, and conclude that the counterparts of cow are mass nouns. They argue that this is why those nouns call for the additional items, classifiers, in NNPs, and that it can explain other notable features of classifier languages as well: the grammatical number system, indefinite article, and counterparts of many and few would play no role in languages with no count nouns.

But this argument for the Mass Noun Hypothesis has a conspicuous problem. Languages with all the above-mentioned features might have other devices that one can use to distinguish count nouns from mass nouns. In particular, they might have counterparts of quantifiers listed in (d): each, every, several, etc. I shall argue that Chinese, like many other classifier languages, has count nouns because it has a counterpart of each (viz., geh 各) that selects count nouns.9 Before I do so, it is useful to examine a different attempt to draw the mass/count distinction for Chinese.

3. Chao on Chinese Classifiers and Count Nouns

Yuen Ren Chao (1968, p. 507ff) distinguished Chinese nouns into mass and count nouns more than four decades ago. (He uses an apt term for count nouns, individual noun.) Although his formulation of the distinction has some infelicities, I think it eventually leads to one successful formulation.

Chao draws a “formal” or syntactic distinction between mass and count nouns of Chinese. To do so, he formulates two tests for count nouns:

(C1) “Mass nouns do not take the individual classifier” ge, 個 (ibid., p. 508f).
(C2) Between the numeral phrase of the form Num+CL*10 and the noun N, “one can insert an optional de for mass nouns but not for individual nouns”, i.e., count nouns (ibid., p. 509).

9 I discuss geh in section 4. It is homonymous with the classifier ge, 個, discussed in section 3, and both are spelled ge in pinyin. To avoid confusion, however, I follow Chao (1968) in romanizing the former as geh.

10 I use ‘CL*’ for the category of numeratives that includes classifiers and measure words. See note 11 below.
I think (C2) is wrong. But I think (C1), Chao’s main criterion recently rediscovered by Zhang (2009), leads to one good test for count nouns.

Let us first see why (C2) fails. To do so, it is useful to consider Chao’s distinction of *numeratives*, which include classifiers and measure words.\(^{11}\) He (*ibid.*, p. 584ff) distinguishes eight kinds thereof. They include: (a) *individual classifiers or individual measures* (e.g., *tou* (CL: animal)); (b) *group measures* (e.g., *zu* ‘group’); (c) *partitive measures* (e.g., *fen* ‘portion, share’); (d) *container measures* (e.g., *wan* ‘bowl’); and (e) *standard measures* (e.g., *ma* ‘yard’).\(^{12}\) The category of classifiers (or “individual measures”) is closely related to that of count nouns (or “individual nouns”). Chao says that count nouns “are [in general] associated with their specific classifiers, so that in dictionaries the specific classifier must be cited under each individual noun to identify its class” (*ibid.*, p. 507). Now, some of the non-classifier numeratives (e.g., the group measure *zu* ‘group’) can match nouns to be considered count nouns (e.g., *niu* ‘cow’) to yield NNPs with *de* (e.g., *san zu de niu* ‘three groups of cows’). So (C2) is false.\(^{13}\)

But I think (C1) yields a good test for Chinese count nouns. According to (C1), the classifier *ge* is not applicable to mass nouns: *shui* ‘water’, *niunai* ‘milk’, *rou* ‘meat’, etc. If so, nouns that can take *ge* must be count nouns. It

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\(^{11}\) Many Chinese linguists (e.g., Cheng & Sybesma) use *classifier* broadly to include all measure words, without distinguishing classifiers and measure words. But Chao (1968, p. 584ff) uses *measure word* (or *measure*) broadly, and *classifier* for just one of the eight kinds of “measures” that he distinguishes. I follow Chao in using *classifier* in its narrow and proper sense (I do not think classifiers pertain to measurement of quantity), but use *measure* (word), too, in its narrow and proper sense. For I think there is an important contrast between classifiers in the proper sense and the English measure words (and their classifier language counterparts). I use *numerative* as a broad term that covers both classifiers and measure words (and some others).

\(^{12}\) The other three kinds are: classifiers associated with V-O constructions, temporary measures, and quasi-measures.

\(^{13}\) Chao (1968, pp. 555 & 588) formulates a modification of (C2): classifiers cannot take *de*. Cheng & Sybesma (1998; 1999) use this as their main test for classifiers (which they call *count-classifiers*). But Chao, unlike Cheng & Sybesma, does not hold that it gives a sufficient condition for classifiers; some group measures (e.g., *dui* ‘pair’), he says, cannot take *de*. See Zhang (2009) for other problems with Cheng & Sybesma’s tests for classifiers.
is straightforward to extend this test to Japanese and Korean, which have cognate classifiers, *ko* (or -*tu*) and *kay*, respectively. I recently came to independently realize that the cousin of (C1) holds for Korean, and learned from Niina Zhang (p.c. Jan. 1, 2009) and Takashi Iida (p.c. Jan. 5, 2009) that (C1) and its Japanese cousin hold for Chinese and Japanese, respectively, as well. (Thanks are due to them.)

Whether or not a noun can take *ge*, however, would seem to have nothing to do with the usual mass/count distinction for non-classifier languages (e.g., English). If so, what is the reason for taking the *ge* test to pertain to the mass/count distinction, rather than to a distinction between two kinds of mass nouns? To answer this question, it is necessary to give an account of the function of the classifier.

To do so, it is useful to compare *ge* with some of the group measures: *dui* ‘pair’, *shuang* ‘pair’, and *da* (Chinese transliteration of the English *dozen*). Their English counterparts figuring in two *pairs* of pigeons, several *dozens* of classifiers, etc. can match only count nouns. (Note that Pelletier & Schubert (2003, p. 250f), for example, lists their sibling, *scores of*, as one of the counting phrases, which cannot match mass nouns.) Similarly, those Chinese group measures can match only count nouns.14 Now, the group measures can be considered cousins of *numerals*, namely, *grammaticalized versions of numerals* that might apply only to certain things that meet certain conditions. Two *pairs* of shoes, pigeons, or pebbles are four (i.e., two times two) shoes, pigeons, or pebbles that meet certain conditions. Just as *pair* relates to two, so do *dui* (or *shuang*) and *da* relate to two and twelve, respectively. It is the same, I think, with *ge* (and other classifiers) except that they relate to one.

To see this, note that the talk of a pair or dozen of certain things presupposes the talk of *individuals* that form the pair or dozen: *individual* shoes, *individual* pigeons, *individual* pebbles, etc. The classifier *ge* relates to this very notion of *individual*, which contrasts with the notion of *group* or of *all the things belonging to a group*. Accordingly, the Chinese word *ge* is also used as an adjective meaning *individual*, and as the first component of the noun for individuals: *ge.ti*, which literally means *individual body*; and it is

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14 Note that this by itself suffices to show that Chinese has count nouns. See the first paragraph of section 4.
the same with its Japanese and Korean cognates. Now, the notion of individual
does not pertain to mass nouns. We do not talk of individual water,
because water does not relate to a group to which individuals belong – the
relation that a portion of water some has to water differs from the relation
that an individual cow has to a group of cows (or to all the cows). So a
mass noun cannot take ge, and taking ge is a mark of count nouns. Given
the connection between ge and the notion of individual, we might say that
the phrase yi ge gezi (one CL pigeon ‘one pigeon’), for example, means
one individual pigeon. This does not mean that ge, used as a classifier, is an
analogue of the English adjective individual. Here again, comparison with
dui, shuang, and da is useful. The classifier, like these group measures, is
a cousin of numerals, namely, a grammaticalized version of the numeral
for one. To say that something is yi ge gezi is to say that it is one times one
pigeon (i.e., one pigeon). The classifier relates to the notion of individual
through its connection to the notion of one. For to be an individual pigeon,
for example, is to be one pigeon or one of the pigeons.

It is the same, I think, with other classifiers, which, like ge, are called
individual measures in contrast to group measures by Chao. One of the
classifiers is zhi (CL:one-of-a-pair), which relates to one of a pair of certain
things (e.g., a hand). It is a version of the numeral for one that is applicable
to something only if it is (or is considered as) one of two things that form a
pair. So it has a clear relation to dui or shuang ‘pair’.

The specific classifier tou, for example, which applies only to animals,
is a grammaticalized version of yi ‘one’ that has restricted application. It
might be useful to compare this with the English pronoun she (or he). The
latter might be semantically decomposed into two parts: the pure pronoun
part, and the part relating to its restriction to females (or males). In some
languages, the decomposition is transparent: the Korean counterpart of she,
ku.nye, has two morphemes: ku, which indicates the pronoun function, and
nye, which comes from the noun for females. Classifiers, I suggest, work
like English demonstratives she, rather than its Korean counterpart, in the
way it marks the restriction on their use.

Now, does Chinese have an unrestricted cousin of yi ‘one’, a classifier that
can be used for things of any kind whatsoever? Such classifiers are called
general classifiers, and they are classifiers that can match any count noun.
(Mass nouns, recall, take no classifiers.) Chao, it seems, holds that *ge* is such a classifier:

\[(C1*)\] The classifier *ge* “is applicable to all [count] nouns” \((ibid., p. 588)\).

This, together with (C1), yields a syntactic characterization of Chinese count nouns:

\[(C)\] A noun (of Chinese) is a count noun if, and only if, it can take *ge*.

Whether \((C1*)\) holds, however, seems to be controversial. To discuss whether it holds or not, we would need an independent condition for count nouns. (Chao’s second test for count nouns, \((C2)\), might have yielded such a condition, but we have seen that \((C2)\) does not hold.) We will see a few independent conditions for count nouns in section 4. For now, however, we can approach the question by noting that the following holds for the reason explained above:\(^{15}\)

\[(C3)\] A noun (of Chinese) is a count noun if it has a specific classifier.

(Also recall that nouns that can take *dui* ‘pair’, *shuang* ‘pair’, *da* ‘dozen’, etc. are count nouns.) If so, can one use *ge* in place of any specific classifier? Chao gives a somewhat cautious answer to this question: the classifier *ge* “is a possible alternate for almost any . . . classifier” \((ibid., p. 508; my italics)\). Here he seems to envisage possible exceptions to \((C1*)\), although he does not give any specific exceptions. Li & Thompson (1981) do not give a completely positive answer to the question, either. They say *ge* “is gradually becoming the general classifier and replacing the more specialized ones” \((1981, p. 112)\). If so, it might not yet have become the general classifier.\(^{16}\)

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\(^{15}\) See Chao’s passage on classifiers and count nouns \((ibid., p. 507)\) quoted in the third paragraph of this section.

\(^{16}\) Although Korean has a cognate classifier, *kay*, and it is often said to be a general classifier, it applies only to nouns for inanimate things, not to, e.g., *kwun.in* ‘soldier’. See Lee & Ramsey (2000, p. 88). Youngwha Kim (p.c. July 11, 2009) confirms
Whether (C1*) holds or not, we can formulate an alternative that preserves its spirit:

\[(C1^{**})\] A noun (of Chinese) is a count noun only if it can take a classifier.

This holds because a count noun takes either a specific classifier or else \textit{ge}. Most count nouns have classifiers specific to them, and count nouns with no specific classifiers, as Chao says, can take \textit{ge} (\textit{ibid.}, p. 508).\footnote{So we might say that \textit{ge} is a \textit{generic} classifier, one that can be used when no specific classifier is available, whether or not it is a general classifier. I think its Korean cognate, \textit{kay}, is a generic, but not a general, classifier.} This yields the following characterization of count nouns:

\[(C^*)\] A noun (of Chinese) is a count noun if, and only if, it can take a classifier.

For mass nouns can take neither \textit{ge} nor any other classifiers, which also pertain to \textit{individuals: individual} persons, \textit{individual} animals, etc. The Chinese noun \textit{shui} ‘water’ and \textit{niunai} ‘milk’, for example, can take no classifier, because the notions of \textit{individual} and \textit{one} pertain no more to these than to their English counterparts.

This means, note, that the proper use of \textit{ge}, be it a general classifier or not, requires distinguishing count nouns from mass nouns. Chinese speakers must understand the distinction to decide whether or not to use \textit{ge} for nouns with no specific classifiers: if they are count nouns, one can use \textit{ge} as a back-up; if not, one cannot do so.

4. Count Nouns of Chinese

I think (C*) encapsulates an important insight. Note that it does not rest this with various examples; and Chungmin Lee (p.c. July 11, 2009) points out that \textit{kay} is used as a general classifier in \textit{children’s} speech. But the Chinese \textit{ge} is used much more widely, as Zhang (2009) shows. Martin (2004, p. 768) says the Japanese \textit{-tu} is a general classifier.
on what one calls classifiers. Whether one calls them *count-classifiers*, *sortal classifiers*, *individual measures*, *individual classifiers*, or simply *classifiers* is irrelevant. The crucial point is that among the numeratives of Chinese (or any other classifier language), there is a distinct group that includes those that relate to the notion of *individual* via the notion of *one*, and thus pertain only to a special group of nouns that can be called *count nouns* (Jespersen) or *individual nouns* (Chao). Proponents of the Mass Noun Hypothesis deny this. They hold that all nouns of classifier languages are mass nouns because there are no numeratives that relate to the notion of *individual*. But this is clearly wrong. Some of the siblings of classifiers, such as *dui/shuang* (‘pair’) or *da* (‘dozen’), have transparent connections to English expressions that relate to the notion of *individual* through their connection to numerals (e.g., ‘pair’ or ‘dozen’).

We can now see that the Mass Noun Hypothesis results from applying a wrong model of numeratives to classifiers. Clearly, the ‘gallon’ or ‘cup’ model fails to apply to English counting expressions, such as ‘pair’, ‘dozen’, or ‘score’. If so, it is wrong to assume that the model applies to all numeratives of classifier languages, including classifiers. It does not apply to the Chinese counterparts of ‘pair’ and ‘dozen’, and there is no reason to take classifiers to be closer to ‘gallon’ or ‘cup’ than to ‘pair’ or ‘dozen’. The Chinese NNP *san tou niu* (three CL cow ‘three cows’), for example, draws no more syntactic parallel to *three gallons of milk* or *three cups of water* than to *three dozens of cows* (or *three dozen cows*). And there are many good reasons to compare classifiers to ‘pair’ or ‘dozen’, as we have seen.

Applying the ‘pair’ or ‘dozen’ model to classifiers, one can reach the account of classifier presented in section 3: classifiers, like ‘dozen’, can match only count nouns. I think the account is on the right track. But it has limitations in relating the mass/count distinction drawn for Chinese to the distinction drawn for non-classifier languages. (C*) characterizes count nouns by invoking a special group of numeratives, viz., classifiers. So it fails to yield a syntactic characterization of Chinese count nouns–unless one can supplement it with a syntactic characterization of classifiers. More

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18 Chao’s modification of (C2) mentioned in note 13 is meant to give such a characterization of classifiers, but it fails to yield a correct characterization of classifiers (see note 13).
importantly, even if one can give such a characterization of classifiers, it is not clear how (C*), as supplemented with the characterization, relates to the usual characterization of the mass/count distinction for non-classifier languages. In this connection, it is useful to note that compare it with (C). (C) yields a correct syntactic characterization of Chinese count nouns provided that the classifier *ge* has become a general classifier. Even if this holds, however, it would be due to an accidental feature of *ge*. So one cannot automatically extend (C) to other classifier languages, even those with cognates of *ge* (e.g., Korean), to give syntactic characterizations of their count nouns. It would be much harder to link (C) or (C*) to the usual characterizations of count nouns for non-classifier languages.

Some might suggest that this is unavoidable. They might hold that there is bound to be a substantial gap between the mass/count distinction for classifier languages and the distinction for the other languages because one cannot characterize count nouns of classifier languages without invoking the distinction between classifiers and other numeratives. Aikhenvald seems to suggest this when she says “In numeral classifier languages, the distinction between countable and uncountable nouns is realized through classifiers and quantifiers [i.e., some of the other numeratives]” (2003, p. 249). Cheng & Sybesma are more explicit. They hold that in Chinese, “the count-mass distinction is grammatically encoded at the level of the classifiers [i.e., numeratives]” (1998, p. 410) because “in a language without number morphology, the semantic [character] of count nouns is not made visible . . . except by using [numeratives]” (1999, p. 520; my italics). I disagree.

Although Korean linguists do not usually draw the mass/count distinction for Korean, some of them argue that the distinction applies to Korean as well.19 Most of the devices that they invoke to draw the distinction for Korean are not classifiers or other numeratives, and they have more transparent connections to the devices used in the usual mass/count distinction. Moreover, I think some of those devices have counterparts in many classifier languages. Let me give a brief sketch of the Chinese counterparts of such devices.

First, Chinese has the adverb *geh* ‘each’, the counterpart of the English

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determiner each used adverbially, as in, e.g., ‘They have each decided, haven’t they?’ Like each, geh can help to create contexts that admit only count nouns. Consider, e.g., the following sentence:

\[(2) \text{ Niu (dou) geh you changchu he duanchu.} \]

\textit{cow (all) each have strength and shortcoming}

‘Each cow has strengths and shortcomings.’

Just as the underlined cow can be replaced only by count nouns, so can the underlined niu be replaced only by count nouns. Second, Chinese, like any other languages, has size adjectives: \textit{da} ‘big’, \textit{xiao} ‘small’, etc. And size adjectives, as Bunt (1985, p. 199) notes, cannot combine with mass nouns (*big water, for example, is not well-formed).\textsuperscript{20} Third, \textit{henduo} ‘a lot’ is the Chinese analogue of \textit{many} and \textit{much}. It does not simply amount to \textit{much}, as the Mass Noun Hypothesis predicts, but has the number/quantity duality, as noted in section 2. That is, it pertains to the number of certain things (e.g., cows) when it combines with count nouns, and to the quantity of some stuff (e.g., meat) when it combines with mass nouns: \textit{henduo niu} means \textit{many cows}, but \textit{henduo rou} means \textit{much meat}. Now, the quantifier cannot have this duality unless Chinese has count nouns as well as mass nouns. And the resolution of its duality when it combines with nouns yields a distinction between mass and count nouns.\textsuperscript{21}

These devices, as I have noted, are the Chinese counterparts of devices found in Korean. I think the same devices can be found in Japanese and many other classifier languages as well. In fact, I find it hard to imagine full-blown languages with no such devices whether they employ classifiers or not. This is the grounds on which I propose the Count Noun Hypothesis:

\textsuperscript{20} Thanks are due to Chungmin Lee for pointing this out, and to Niina Zhang for reference to Bunt (1985).

\textsuperscript{21} There are some devices specific to Chinese. Chinese counterparts of \textit{this water} and \textit{this cow}, for example, have an interesting disparity: the counterpart of \textit{this cow} has a classifier, but the other does not. One can explain this by appealing to the fact that the Chinese nouns \textit{shui} and \textit{niu} (‘water’ and ‘cow’) are mass and count, respectively. See my “Towards count nouns of classifier languages: the Chinese route”, unpublished manuscript.
classifier languages not only have count nouns as well as mass nouns, but have devices that one can use to draw a syntactic distinction between the two kinds of nouns.

Those who hold the opposite hypothesis, the Mass Noun Hypothesis, assume that all numeratives of classifier languages have the same function, that they specify the units for measuring quantities. But this assumption is clearly wrong. Just as it is wrong to take ‘pair’, ‘couple, or ‘dozen’ to have the same function as ‘liter’, ‘pound’, or ‘cup’, so is it wrong to take classifier language counterparts of the former to have the same function as classifier language counterparts of the latter. And there are good reasons, as we have seen, to take classifiers to be closer to the former than to the latter. This leads one to the view that classifiers are cousins of the numerals for one, namely, their grammaticalized forms. To say that some things are three \textit{pairs} of cows, for example, is say that they are three \textit{times} two cows (that satisfy some extra conditions). Similarly, to say that some things are \textit{san tou niu} ‘three CL cow’, for example, is to say that they are three \textit{times} one cows (that satisfy some extra conditions). If so, taking classifiers is a mark of count nouns just as taking the counting phrases (e.g., ‘pair of’ or ‘dozen of’) is a mark of count nouns. Then languages with classifiers must have count nouns. And Chinese, we have seen, has some other expressions that can combine only with count nouns, such as \textit{geh} ‘each’ and \textit{da} ‘big’. Just as ‘*big water’ and ‘*Each water is thirst-quenching’ are ill-formed, so are their Chinese counterparts. I suggest that the situation is essentially the same with other classifiers languages. And I leave it for another occasion to spell out the details by examining the devices for distinguishing count nouns from mass nouns in other classifier languages, and to fully develop the account of the function of classifiers sketched in this paper.

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