Afterthoughts on Chinese Classifiers and Count Nouns

Byeong-uk Yi

The article reprinted above as the main text of the present chapter, Yi (2009b), discusses Chinese nouns and numeral classifiers. In doing so, it presents an outline of the distinction between mass and count nouns of numeral classifier languages, and sketches an account of the function of numeral classifiers. The accounts of classifiers and of classifier language nouns offer alternatives to those that dominate discussions of classifier languages in contemporary linguistics. I think that the dominant accounts are fundamentally mistaken, and that the alternatives outlined in the article are on the right track. They have been developed further in my subsequent works, including Yi (2010) and (2011). On the occasion of reprinting the short piece that lays out a program for further research in a book that covers a wide range of issues about classifier languages, especially Chinese, Japanese, and Korean, I wish to add some remarks that might help to put the discussions in the article in a broader perspective.

---

*The research for this work was supported in part by a Chiang Ching-Kuo Foundation Research Grant. This is hereby gratefully acknowledged.

1Yi (2011) is partially reprinted as Chapter 1 of this volume. See also Yi (2009a).
1. Numeral Classifiers and Classifier Languages

A majority of languages of the world draw a clear syntactic distinction between two kinds of numeral noun phrases, (a) those relating to the number of some things of a given kind, and (b) those relating to the amount of some stuff, such as the following:

(1) a. three cows
    b. three pounds of meat

(1a), where the noun ‘cow’ (or its plural form) combines directly with the numeral ‘three’, has no analogue of the measure word ‘pound’ that is essential in (1b). It is not the same, it seems, with a large number and variety of languages of the world. Consider, for example, the Chinese translations of (1a) and (1b):

(2) a. san tou niu
    three CL\_animal cow
    ‘three cows’

    b. san bang rou
    three pound meat
    ‘three pounds of meat’
(2a) and (2b) draw syntactic parallels. Unlike its English counterpart, (1a), (2a) has a special expression, *tou*, that intervenes between the numeral *san* ‘three’ and noun *niu* ‘cow’; and the expression takes the same position in (2a) as the measure word *bang* ‘pound’ does in (2b). It combines with a numeral (e.g., *san*) and accords with a matching noun (e.g., *niu*) to yield a numeral noun phrase that relates to the number of some things that the noun relates to (e.g., the number of cows). Such particles are usually called *numeral classifiers* (*classifiers* for short), because they accord with a more or less restricted range of common nouns. And languages whose counterparts of the likes of (1a) regularly, if not invariably, include classifiers are called *numeral classifier languages* (*classifier languages* for short).

Such languages include, among many others, the three East Asian languages studied in this book: Chinese, Japanese, and Korean. The classifier systems of these languages are not unrelated. The Chinese classifier system, which is probably the most intensively studied classifier system, has made indelible marks in the others through linguistic contact, although Japanese and Korean have no genetic ties to Chinese. Despite the resulting affinities, however, there remain significant differences among the three classifiers systems, which warns against the temptation to assume that regularities found in one of them (e.g., that of contemporary Chinese or its various dialects) must hold for the others as well. Let me note three of the most conspicuous, if often ignored, differences.

First, Chinese classifiers can figure in demonstrative phrases without numerals, thus directly following demonstratives, as in the Chinese counterpart of ‘this cow’:
(3) zhe **tou** niu

this/these CL\textsubscript{animal} cow

‘this cow’

In Japanese and Korean, however, classifiers can never directly follow demonstratives.

Second, contemporary Chinese has essentially just one standard form of numeral noun phrases:

\[
[C] \quad \text{Num} - \text{CL}^* - \text{N}
\]

where ‘Num’ is for numerals, ‘CL\textsuperscript{*}’ for *numeratives*, which include classifiers and their syntactic cousins (e.g., measure words),\(^2\) and ‘N’ for common nouns. Japanese and Korean, by contrast, have two standard forms of numeral noun phrases involving classifiers or other numeratives:

\[
[\text{JK1}] \quad \text{N} - \text{Num} - \text{CL}^*
\]

\[
[\text{JK2}] \quad \text{Num} - \text{CL}^* - [\text{Genitive Particle}] - \text{N}
\]

[JK2] draws parallels to [C], except that it involves genitive particles: the Japanese *-no* and the

\(^2\)Numeratives, in classifier languages, form a syntactic group that includes numeral classifiers, measure words, the usual para-numerals, etc. See, e.g., Yi (2009b, §3) and (2011, §§2-3), both reprinted above.
Both, unlike the English ‘of’, are postpositive particles, and take the preceding Num – CL* phrases (not the subsequent nouns) as complements. So instances of [JK2] (e.g., (4b) below) do not draw syntactic parallels to partitive (or pseudo-partitive) constructions of English, such as (1b), where ‘of’ takes the noun ‘meat’ as complement. It is the same with instances of the Chinese form [C’] given below, which has the postpositive particle de.

---

3 Both, unlike the English ‘of’, are postpositive particles, and take the preceding Num – CL* phrases (not the subsequent nouns) as complements. So instances of [JK2] (e.g., (4b) below) do not draw syntactic parallels to partitive (or pseudo-partitive) constructions of English, such as (1b), where ‘of’ takes the noun ‘meat’ as complement. It is the same with instances of the Chinese form [C’] given below, which has the postpositive particle de.
(2) c. san **bang** de rou

three pound GEN meat

‘three pounds of meat’

But [C’] has substantial restrictions on numeratives: although measure words can figure in numeral noun phrases of the form, as in (2c), classifiers cannot usually figure in such phrases.⁴ So for example, *san tou de niu* [three CL GEN cow], unlike (2c), is ill-formed. By contrast, its Korean and Japanese counterparts, which mean *three cows*, are unexceptionable, for [JK2] does not have similar restrictions.

The last difference to note concerns whether the classifier system (or, more precisely, the numerative system) is mandatory. In the case of contemporary Chinese, it is arguable that classifiers or the like are mandatory in the sense that nouns cannot directly combine with numerals, but require mediation of classifiers or other numeratives, as in (2a) or (2b). And it is usual to assume that the same holds for Japanese, although this is more controversial. But it is clearly different with Korean.

Korean, as noted above, has two standard forms of numeral noun phrases that involve numeratives: [JK1] and [JK2]. In addition, it has two standard forms of numeral noun phrases that do not involve numeratives:

---

⁴Chao (1968, 555 & 588) holds that classifiers cannot figure at all with *de* in phrases of form [C’], and Cheng & Sybesma (1998, 388) and (1999, 515), among others, follow him. But Tang (2004, 444) gives examples that show that with numerals for large numbers, classifiers can enter form [C’]. See also Zhang (2009, §3.2.3).
The seys in (4c) is the noun form of the numeral sey, which figures adjectivally in (4a), (4c), and (4d), and is comparable to the ‘three’ in ‘three of the students’. Accordingly, it has the same syntactic status as the numeral-classifier compound sey myeong in (4a); this is a noun phrase because Korean classifiers and other numeratives are considered a kind of nouns, “dependent” nouns.

So ‘three students’, for example, can also be translated as follows:

(4)  c.  haksayng seys

       student three

       ‘three students’

d.  sey haksayng

       Three student

       ‘Three students’

While (4a) and (4b) have the classifier myeng, which matches the noun haksayng ‘student’ while combining with the numeral sey ‘three’, no numeratives figure in (4c) and (4d), where the noun combines directly with the numeral sey ‘three’ (or its noun form seys ‘three’).\(^5\)

Note that Korean is by no means a rare exception among classifier languages in allowing some nouns to combine directly with numerals. The same applies to contemporary Japanese. While one might argue that contemporary Chinese clearly differs from Korean in this respect, this would

\(^5\)The seys in (4c) is the noun form of the numeral sey, which figures adjectivally in (4a), (4c), and (4d), and is comparable to the ‘three’ in ‘three of the students’. Accordingly, it has the same syntactic status as the numeral-classifier compound sey myeong in (4a); this is a noun phrase because Korean classifiers and other numeratives are considered a kind of nouns, “dependent” nouns.
hold at best for the Chinese of the relatively recent period. Historical studies of Chinese classifiers make it clear that the virtually mandatory classifier system of contemporary Chinese is the result of a long period of expansion, and strengthening, of a classifier system that emerged originally in an indefinite form in ancient times.

The existence of languages with a non-mandatory classifier system directly raises problems for the dominant view of classifiers and of classifier language nouns, as discussed in the next section.

2. Count Noun Thesis and Para-numeral Account

It is a dominant view in contemporary linguistics that classifier languages differ radically from other languages (e.g., English) in the system of common nouns. The view includes the mass noun thesis about classifier languages, the thesis that (a) classifier languages have no count nouns, and (b) all their common nouns are mass nouns. This thesis is complemented with a matching account of the semantic function of classifiers, the measure word account. On this account, classifiers are just a kind of measure words; they have the same semantic, as well as syntactic, function as measure

---

6For a discussion of problems with taking Japanese and even contemporary Chinese to be mandatory classifier languages, see, e.g., Yi (2010, §2.5) and (2011, §4). About Japanese numeral noun phrases without classifiers, see, e.g., Zubin & Shimojo (1993), Downing (1996, 73), Shimojo (1997), and Kobuchi-Philip (2011, §3.2).

7For historical studies of the Chinese classifier system, see, e.g., Peyraube (1998) and Wang (1994).

8In the article reprinted above, I call it “mass noun hypothesis”, following Hansen (1983, Chapter 2), one of its early proponents who proposes it with regard to Chinese. Given its wide and firm acceptance nowadays, however, it would be appropriate to call it “mass noun thesis”, as in my subsequent works, including Yi (2010) and (2011). Accordingly, the thesis called “count noun hypothesis” in the article is called “count noun thesis”. 8
words, which are commonly found in non-classifier languages. Proponents of the dominant view argue that this, together with the mass character of classifier language nouns, explains why classifiers are needed. Classifier language nouns, on this view, cannot combine directly with numerals but require mediation of classifiers for the same reason that English mass nouns (e.g., ‘meat’) cannot combine directly with numerals but require mediation of measure words (e.g., ‘pound’).

The article reprinted above argues that the dominant view of classifiers and of classifier language nouns is fundamentally mistaken, and lays out an alternative view. It argues against both the mass noun thesis and the matching account of classifiers as measure words. And it presents alternatives to them. It proposes a thesis opposite to the mass noun thesis (2009b, §1):

*Count Noun Thesis:*

(a) Classifier languages have *count nouns* as well as mass nouns, and (b) the languages have *morphosyntactic* devices for distinguishing count nouns from mass nouns.

And it formulates an account of the function of classifiers that meshes well with the count noun thesis (2009b, §3):

The classifier is a cousin of numerals, namely, a grammaticalized version of the numeral for the number one that typically has restricted application.

This account is called the *para-numeral account* in my subsequent works, in which I develop it
On the para-numeral account, the classifier tou in (2a), for example, is a cousin of the numeral for one that matches only nouns for animals. So (2a) essentially means three times one cows, namely, three cows.

On this account, the affinity between classifiers and measure words is limited to their syntactic parity. Classifiers, on the account, are just variants of numerals that can figure as syntactic peers of measure words. Such variants of numerals can be called para-numerals.

Note that we can easily find para-numerals in non-classifier languages. English, for example, has ‘pair’, ‘couple’, ‘brace’, ‘dozen’, ‘score’, etc. While these have clear semantic connections to numerals (‘two’, ‘twelve’, ‘twenty’, etc.), they can combine with numerals and accord with matching nouns to figure in numeral noun phrases, such as the following:

\[
\begin{align*}
(1) & \quad c. \text{ three } \{\text{pairs, couples, braces}\} \text{ of birds} \\
& \quad d. \text{ three dozens of eggs} \\
& \quad e. \text{ three scores of eggs}
\end{align*}
\]

These phrases, note, draw syntactic parallels to English measure word phrases, e.g., (1b). Similarly, classifier languages have para-numerals that can figure as syntactic peers of measure words. For example, Chinese has dui ‘pair/couple’, shuang ‘pair/couple’, da ‘dozen’; Japanese has kumi

---

9See Yi (2010; 2011). I first formulated the account in Yi (2009a, §5), where numeral classifiers are characterized as “one counters”. Greenberg formulates essentially the same account of classifiers in the beginning of his (1972, 171f), where he characterizes them as “unit counters”. But he fails to draw from this the consequence that nouns taking classifiers must be count nouns, and concludes by putting forward a conflicting account of classifiers, one that takes the classifier to be an “individuator” (ibid., 184). This leads to a duality in the very notion of “unit counter”, as one can see in Allen (1977, 293f). Greenberg’s account is discussed in Yi (2010, §6).
‘pair/couple’, tsui ‘pair/couple’, dassu ‘dozen’; and Korean has ssang ‘pair/couple’, khyeley ‘pair’, tasu ‘dozen’. And the translations of (1c) and (1d) into Chinese, for example, draw syntactic parallels to both (2a) and (2b), just as (1c) and (1d) draw syntactic parallels to (1b).

Classifiers, on the para-numeral account, are siblings of those usual para-numerals. They, like the usual para-numerals, are related semantically to numerals, but differ from them in that they relate to the number one. So just as (1c) and its classifier language cousins mean three times two birds, so does (2a) mean three times one cows.

Classifier languages, then, differ from non-classifier languages in that they have multiple para-numerals for one that accord with different kinds of nouns, and employ them regularly in numeral noun phrases relating to the numbers. Non-classifier languages, by contrast, have only para-numerals for numbers greater than one; or if they have para-numerals for one, they are not regularly used so that numeral noun phrases involving them are considered rare exceptions.

Note that the para-numeral account does not invoke any special features of classifier language nouns as the factors that call for classifiers. Classifiers, on the account, can figure in numeral noun phrases relating to the numbers, because they are para-numerals, and the use of classifiers in such phrases helps the phrases to draw syntactic parallels with both measure word phrases and the usual para-numeral phrases. It is an orientation towards such syntactic parallelism, I think, that drives the inception, expansion, and strengthening of the classifier system.

---

10 The Chinese da, Japanese dassu, and Korean tasu result from transliterations of ‘dozen’.

11 For example, English has ‘head’, ‘sail’, and ‘stem’ in ‘three head of cattle’, ‘three sail of ships’, and ‘three stems of roses’.

12 This view is put forward by Greenberg as a “diachronic hypothesis”, which holds that classifier languages “have modelled the unit counting construction [i.e., the numeral noun phrase
This, to be sure, does not explain why classifiers or other numeratives must be used in numeral noun phrases of classifier languages. But it is a virtue of the account that it does not do so. For many classifier languages with comprehensive classifier systems (e.g., Korean), we have seen, do not require numeratives in numeral noun phrases. And there is good reason to think that most classifier languages commonly thought to have such a requirement (e.g., contemporary Chinese or Japanese) would turn out not to thoroughly implement the requirement on close scrutiny. Perhaps some of them might. If so, however, it would be just the result of their having the strongest possible demand for syntactic parallelism among all kinds of numeral noun phrases. And the demand for such parallelism is a matter of degree, not a matter of linguistic type with sharp boundaries. The same language can gradually expand, and strengthen the grip of, the classifier system over time. Further, if the classifier system of a language, through this process, ever reaches the climax, the strongest level of demand for numeratives, it might well turn to the reverse process of weakening, contraction, and even decay.13

Those who hold the dominant view in contemporary discussions of classifier languages would disagree. They take classifier languages to belong to a linguistic type with a sharp boundary, and attempt to explain why they must require numeratives in numeral noun phrases. The reason, they propose, lies in a common character of nouns of classifier languages: all those nouns are mass nouns. So the nouns require measure words to enter numeral noun phrases, and classifiers serve as involving a classifier] after the preexistent measure and non-unit count constructions” (1972, 173). He attributes the same view to Sen-Gupta (1970, 677f), who says “We consider MW [i.e. measure word] as the basis of NuCl [i.e. numeral classifier]” (quoted in Greenberg 1972, 173).

13The bare numeral noun phrases of the form of the anti-sandhi yi ‘one’ + N in Beijing Mandarin discussed by Di (2008) might be considered a symptom of the weakening and contraction of the classifier system of the dialect of Chinese.
a convenient stock of measure words that can match them. But this explanation, which results from
the mass noun thesis, cannot be correct. The thesis implies that classifier languages can have no
numeral noun phrases whatsoever in which nouns combine directly with numerals. But Korean,
among many other classifier languages, does have such phrases (e.g., (4c) and (4d)), as we have seen.

Defenders of the mass noun thesis might reply that the thesis holds at least for a smaller
group of classifier languages, “genuine” classifier languages (i.e., languages with a mandatory
classifier system), and that this explains why those languages have such a classifier system. But we
have seen a good reason for rejecting this view as well. Like most “spurious” classifier languages,
contemporary Chinese, which is usually considered a “genuine” classifier language, has the usual
para-numerals: dui ‘pair/couple’, shuang ‘pair/couple’, and da ‘dozen’. These are direct counterparts
of the English para-numerals ‘pair’, ‘couple’, and ‘dozen’. Now, these cannot match mass nouns
just as the usual numerals cannot combine directly with them. For example, (5a), below, is as ill-
formed as (5b), below:

(5)  a.  *three pairs of milk
     b.  *three milk

It is the same with those Chinese para-numerals. The Chinese translation of (5a) is just as ill-formed,
and for the same reason. The Chinese para-numerals, like their English cousins, cannot match mass
nouns. If so, Chinese nouns that can take them (e.g., niu ‘cow’) must be count.

Moreover, there are many other kinds of linguistic devices of Chinese that show that Chinese
have count nouns. And some of them have direct counterparts in Japanese and Korean, and relate
to the devices that one can use to formulate complete syntactic criteria for count nouns for non-classifier languages.\textsuperscript{14} Among such devices, let me mention just one kind.\textsuperscript{15}

It is commonly thought that classifier languages have no exact counterparts of ‘many’ that contrast with counterparts of ‘much’, which is often taken to support the mass noun thesis. Consider the Chinese, Japanese, and Korean analogues of ‘many’: henduo (Chinese), takusan (Japanese), and manh- (Korean). They serve as analogues of ‘much’ as well. That is, their closest counterpart in English is ‘a lot (of)’, which has the number/quantity duality. They relate to the number of some things of a given kind when they combine with some nouns (e.g., counterparts of ‘cow’), but relate to the quantity of some stuff when they combine with some other nouns (e.g., counterparts of ‘milk’). And it is the same with the analogues of ‘a few’ in these languages; they can mean ‘a little’ as well. But this does not mean that the languages have no quantifiers that, like ‘many’, relate only to the numbers of some things.

The languages have, for example, exact counterparts of ‘countless’ or ‘innumerable’: wu.shu (Chinese), mu.suu-no (Japanese), and mu.swu-han (Korean).\textsuperscript{16} These, like their English counterparts,
have a transparent relation to the number and counting. They stem from a combination of the Chinese character for the number (the second syllables) with the Chinese character that, like the English suffix ‘-less’, indicates non-existence or absence (the first syllables). So they, like ‘countless’, indicate that the things in question cannot be numbered (in an ordinary sense) because there are too many of them. Consequently, they have substantial restrictions on the nouns that can take them. They cannot directly combine with mass nouns just as the English ‘countless’ cannot do so. For example, *wushu (de) shui [countless (GEN) water], *musuu-no kyuuniku [countless beef], and *mu.swu-han wuywu [countless milk] are as ill-formed as their English counterparts: ‘*countless water’, ‘*countless beef’, and ‘*countless milk’. Despite the restriction, the counterparts of ‘countless’ can directly combine with some common nouns of the languages, e.g., their counterparts of ‘cow’, ‘student’, ‘bird’, ‘egg’, etc. And those nouns can directly take the quantifiers for the same reason that the English nouns can directly take ‘countless’. Such Chinese, Japanese, and Korean nouns are count nouns. They, like English count nouns, relate to some things of a certain kind so that those quantifiers can relate to the number thereof, and contrast with mass nouns of the languages: the Chinese shui ‘water’, Japanese kyuuniku ‘beef’, Korean wuywu ‘milk’, etc.

The Chinese quantifier wu.shu ‘countless’, for example, yields a distinction between mass

17The Japanese -no is a genitive particle, and the Korean -han a suffix for forming adjectives, consisting of two morphemes: -ha- for the predicate stem, and -n for the adjectival form morpheme. (The Chinese wu.shu may sometimes take the genitive particle -de when it is used adjectivally.) Although musuu-no and mu.swu-han are Sino-Japanese and Sino-Korean words, they are fully integrated into the languages, and commonly used. Korean has another word for countless or innumerable: swu.eps-nun, which also involves the Sino-Korean swu ‘number’. 

ooku, see the entry for kazu ‘number’ in Kodansha International (1995, 94). The entry for kazu in Japan Foundation JLI (1986, 328) does not have kazu-ooku as a sub-entry, but gives as an example a sentence that has the compound word (which is translated as ‘great many’).
and count nouns, as we have seen. Like ‘countless’, it relates specifically to the number of some things of a given kind and, thus, can combine directly with some, but not all, common nouns. The nouns that can directly take *wu.shu* must be count nouns, just as the English nouns that can directly take ‘countless’ must be count nouns. And this yields a complete syntactic criterion for Chinese count nouns:

The *wu.shu* Criterion for Chinese Count Nouns:

A Chinese common noun is a count noun if and only if it can directly take *wu.shu* ‘countless’ (or its variant *wu.shu-de* ‘countless’).

This shows that Chinese, which is usually considered a paradigmatic, mandatory classifier language, has (a) count nouns as well as mass nouns, and (b) morphosyntactic devices for distinguishing its count nouns from mass nouns.

The same holds, we have seen, for other classifier languages as well. One can formulate the same criterion *mutatis mutandis* for Japanese and Korean count nouns, because the languages have the cognate quantifiers: *mu.suu-no* (Japanese), and *mu.swu-han* (Korean). Moreover, the criteria formulated for the three classifier languages have a transparent relation to the criterion for count

---

18 The languages have other related expressions one can use to formulate criteria for count nouns. They have counterparts of ‘great majority (in number)’: *dai.duo.shu* (Chinese), *dai.ta.su* (Japanese), and *tay.ta.swu* (Korean). They stem from a compound of three Chinese characters, which mean large/great (the first), many/much (the second), and the number (the third). Because of the third part, they can combine only with count nouns. And, as noted above (see note 16), Japanese and Korean have analogues of ‘many’: *kazu-ooku* ‘(very) many’ (Japanese), and *swu.man(h).un* ‘very many’ (Korean). For more on Chinese, Japanese, and Korean quantifiers specific to the number, see Yi (2010, §4.4.1). See also Kobuchi-Philip (2011, §3.3).
nouns that one can formulate for English using English counterparts of the quantifiers, ‘countless’ and ‘innumerable’:

The ‘countless’ criterion for English Count Nouns:

An English common noun is a count noun if and only if it can directly take ‘countless’ (or, alternatively, ‘innumerable’).

Surely, the criteria formulated for the various languages are merely different manifestations of the same underlying criterion. And the reason that we can formulate essentially the same criteria for all those languages, English and the three classifier languages alike, is that there is an underlying distinction between mass and count nouns that runs through classifier and non-classifier languages. 19

This, I think, shows that the mass/count distinction runs much deeper than is suggested by the usual criteria for drawing it for English and its ilk. The distinction does not rest on the existence of the singular/plural morphology or the possibility of direct combination of count nouns with numerals. Accordingly, the lack of these, and other similar, features in some classifier languages does not separate the languages from English and its ilk as much as suggested by proponents of the mass noun thesis. This thesis, we have seen, fails to hold not only for Korean, a non-mandatory

19Doetjes (1996, 44), Chierchia (1998, 355), and Cheng & Sybesma (1998, 410), for example, reject the second part, (b), of the count noun thesis while agreeing that classifier languages have count nouns in the semantic sense. They argue that all such nouns are still mass nouns in the syntactic sense, and compare them to English pseudo-mass nouns, such as ‘furniture’. But the criterion given above distinguishes classifier language count nouns from ‘furniture’. This might be considered a mass noun in the syntactic sense because it cannot directly combine with ‘countless’. By contrast, the Chinese, Japanese, and Korean counterparts of ‘cow’, for example, are robust count nouns (in the syntactic sense) because they can combine directly with the counterparts of ‘countless’ in those languages. For more on this, see my (2010, §4.2).
classifier language, but also for contemporary Chinese, which is commonly and plausibly considered a mandatory classifier languages. By contrast, the opposite thesis I propose, the count noun thesis, is strongly supported by a close examination of the three East Asian languages, which include some of the most intensively studied classifier languages. Although this does not suffice to establish the thesis, which concerns all classifier languages, it calls for a conceptual shift in the study of classifiers and of classifier language nouns.
References


Burnell, A. C. (1903) “Numeral affixes, coefficients, or determinatives”, in Yule & Burnell (1903), pp. 632-634.


Yi, Byeong-Uk (2009a) “Towards count nouns of classifier languages: the Chinese route”, unpublished manuscript, Department of Philosophy, University of Toronto; available online at http://philosophy.utoronto.ca/people/faculty/byeong-uk-yi.


Yi, Byeong-Uk (2010) “Numeral classifiers and the mass-count distinction”, unpublished manuscript, Department of Philosophy, University of Toronto; available online at http://philosophy.utoronto.ca/people/faculty/byeong-uk-yi.


