

Remarks and Replies

Classifiers Are Functional

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Wu and Bodomo (2009) dispute Cheng and Sybesma's (1999, 2005) analysis of Chinese numeral classifiers as being able to function as definite articles. While I agree with Wu and Bodomo's overall conclusion, here I focus on parts of their argument that do not stand up to scrutiny and distract from their main point. In particular, I argue that Wu and Bodomo's conclusion that numeral classifiers are lexical items is incorrect. Also, I question their apparent conclusion that the availability of numeral classifiers in a language indicates that that language's nouns are inherently mass.

Keywords: classifiers, mass nouns, count nouns, number

1 Introduction

There are well-known differences between numeral classifiers and number marking that are said to be related to broader NP/DP differences between languages like Mandarin and English. The basic facts are illustrated in (1), where the Mandarin classifier *ge*, regardless of the cardinality of the numeral, appears between the numeral and the noun. In contrast, the English translations show that English nouns are differentially number-marked, depending on the choice of numeral.

- (1) *yi/liang ge xuesheng* *Mandarin*
one/two CL student
'one student / two students'

Considering correlative facts such as the absence of articles and sparing use of plural morphology in classifier languages, Chierchia (1998) proposes that nouns in languages like Mandarin are parameterized as mass-denoting arguments, which means that they can appear as bare NPs, in contrast to the claim by Longobardi (1994) and others that nouns must project to DP to be arguments. For Chierchia, given nouns' mass status in Mandarin, when enumerated they require a classifier to make countable units, much as English requires constructions like *glass of* to make units of mass nouns like *water*. In contrast, Chierchia claims, English count nouns like *cat* are predicates and thus have a count interpretation, are pluralizable, and require a determiner for argument status.

Thanks to Honglei Wang and Binh Ngo for help with and comments on the Mandarin and Vietnamese data.

In response to Chierchia's influential model (but see also Gil 1987, 1994, Löbel 1993), some have suggested that classifier languages and number-marking languages might not cleave so cleanly as he supposed. For one, some languages have both classifiers and number marking, and at least some of those languages have numeral + noun constructions that use both (Gebhardt 2009: 191–192). Further, there is some evidence that classifiers may sometimes serve the function of articles. For example, Cheng and Sybesma (2005), while denying that Chinese languages project DP, point to data suggesting that classifiers might have article-like functions, as in the examples in (2) (from Cheng and Sybesma 2005:274, 275).

- (2) a. bun syu *Cantonese*
 CL book
 'the book(*s)'
 b. Wo xiang mai ben shu. *Mandarin*
 I want buy CL book
 'I want to buy a book.'

Wu and Bodomo (2009) (henceforth W&B), in turn, argue against Cheng and Sybesma's proposal that classifiers can be articles. In the end, I agree with W&B that classifiers are not articles, at least not definite determiners, and that Mandarin nouns project DP. But the main point of this article is to clarify certain notions and critically examine two of W&B's lines of argument. First, I show that W&B's conclusion that classifiers are lexical rather than functional items is incorrect. Second, I question their apparent adoption of Chierchia's view that nouns in classifier languages are mass.

2 Classifiers Are Functional

W&B reason that classifiers cannot be articles because articles are functional items and classifiers are not. That classifiers should be considered lexical rather than functional is based on their claim that classifiers contribute semantic content to an expression. As evidence for this claim, W&B point to data like (3a–d) (W&B 2009:488).

- (3) a. yi ben shu *Mandarin*
 one CL.volume book
 'a book'
 b. yi bao shu
 one CL.bag book
 'a bag of books'
 c. yi luo shu
 one CL.pile book
 'a pile of books'
 d. yi xiang shu
 one CL.box book
 'a box of books'

Certainly, for example, ‘a bag of books’ (3b) has different semantic content than ‘a box of books’ (3d); and since *shu* ‘book’ remains constant in all the expressions, it must be the classifiers that are making the meaning distinctions. But the conclusion that classifiers make the difference is faulty for two reasons. First, the classifier *ben* in (3a) does not contribute semantic content to the expression. Second, *bao*, *luo*, and *xiang* in (3b–d), while they do add semantic content, are arguably not classifiers at all but are instead nouns participating in pseudopartitive constructions.

To start, W&B do not consider the important difference between sortal classifiers and mensural classifiers. Lyons (1977) and Croft (1994), among others, point out that the two are very different. Sortal classifiers simply name the noun being classified, while mensural classifiers create arbitrary units for measurement of mass stuff. Mandarin is required to use the classifier *ben* when counting books, as is clear in an expression like *yi *(ben) shu*, but *ben* does not add meaning since it tells us only what we already know about *shu*, that it denotes a booklike object. However, in (3b–d) *bao*, *luo*, and *xiang* are mensural classifiers that create the spatial quantities ‘bag of’, ‘pile of’, and ‘box of’, respectively, and thus contribute to the meaning of the expressions. The examples in (3) also show that while *ben* has no counterpart in English, the examples with *bao*, *luo*, and *xiang* do. That is, in both classifier languages and number-marking languages, mensural classifiers can be used with both count nouns and mass nouns, further indicating the distinction between the sortal and mensural items. For example, Persian, a classifier language, allows the counterpart of English *a box of* to be used with count ‘toys’ and mass ‘detergent’, as in (4).

- (4) a. Maman ye qoti æsbabbazi bæraye bæççe-ha ovord. *Persian*
 Mom a box toy for child-PL brought
 ‘Mom brought a box of toys for the children.’
 b. Maman ye qoti pudre zærfšui bæraye hæmsaye ovord.
 Mom a box detergent dishwasher for neighbor brought
 ‘Mom brought a box of dishwasher detergent for the neighbor.’

Besides the fact that items like *ben* and *bao* should not be lumped together, the stronger claim can be made that mensural ‘classifiers’ are not classifiers at all but instead should be considered quantity-denoting nouns that participate in pseudopartitive constructions, as the English translations in (3) and (4) suggest (see Stickney 2007, for example, on pseudopartitives). Evidence for this comes from the ability of the mensural classifier to be modified, as in Mandarin (5a) and Vietnamese (5b).

- (5) a. Honglei he le liang da wan tang. *Mandarin*
 Honglei eat PARTICLE two big bowl rice
 ‘Honglei ate two big bowls of rice.’
 b. hai thung sach lon *Vietnamese*
 two box book big
 ‘two big boxes of books’

Thus, given that mensural classifiers are not classifiers at all, it cannot be said that classifiers are lexical. Rather, true (i.e., sortal) classifiers are functional items. Therefore, W&B’s argument

that classifiers cannot be articles because articles are functional items and classifiers aren't collapses.

3 Mass and Count Nouns

W&B's assumptions about the mass/count denotations of nouns are unclear. Overall, W&B seem to argue that all Mandarin nouns are mass (W&B 2009:489), and they disagree with Cheng and Sybesma's questioning of Chierchia's (1998) view that the mass/count distinction in nouns is parameterized by language. Yet W&B also seem to adopt the argument by Doetjes (1996) and others that classifiers and number marking are two sides of the same coin, both being "syntactic markers of countability" (W&B:490–491).

In fact, Cheng and Sybesma do present data that strongly suggest that Mandarin indeed makes a distinction between mass and count nouns, just as number-marking languages do. They show, for example, that the particle *de* is optional with mass nouns but barred with count nouns, (6a–b). Also, some adjectives like *da* 'big' can appear only in mass contexts, (6c–d).

- (6) a. san bang (de) rou Mandarin
 three CL_{pound} DE meat
 'three pounds of meat'
- b. *san tou de niu
 three CL DE COW
- c. yi da zhang zhi
 one big CL_{sheet} paper
 'one large sheet of paper'
- d. *yi da zhi gou
 one big CL dog

W&B do not address these data, but, as a side note, I would mention that part of their case against Cheng and Sybesma's proposals comes from misreading their claims about mass and count. W&B interpret Cheng and Sybesma's work as saying that things like liquor and soup can come naturally in glasses and cups rather than in bottles or bowls (W&B 2009:489). But this is the opposite of the claim that Cheng and Sybesma make on page 515 of their 1999 article, where they point out that things like liquor and soup do *not* naturally come in any of these units.

W&B also mischaracterize a technical point of Borer's (2005) theory. Like Cheng and Sybesma, Borer disagrees with Chierchia's idea that nouns are parameterized for mass/count by language. But W&B state that Borer is "defending" Chierchia's assessment "that all nouns' extensions are mass" (W&B 2009:fn. 2). What Borer actually says is that nouns have no mass/count denotation until a determination is made in the syntax. If a noun does not interact with a number marker or classifier (or certain other options), it *defaults* to a mass interpretation (Borer 2005: 108 and elsewhere). While that may seem a small point, it in fact is at the heart of a large part of Borer's analysis, which holds that "listemes" in the lexicon are uncategorized. So, if it's true that a listeme is not even a noun, then it can't possibly be mass or count. Rather than defending

Chierchia's view, Borer devotes significant space (most of pages 87–107 and other sections) to a critique of Chierchia's parameterization theory of noun denotations.

Again, it is unclear where W&B come down on the mass/count distinction in languages' nouns. They seem to lean toward the idea that at least some languages' nouns are parameterized as mass, but they do not address Cheng and Sybesma's evidence to the contrary and they do not make a convincing case that all nouns should be characterized as mass in any language.

4 Concluding Remarks

W&B's main points can be maintained. Adopting the idea outlined by Simpson (2005) and others, they can assume that DP is available for Chinese languages, given that demonstratives are available in these languages and assuming that demonstratives appear somewhere in DP. Putting aside mensural classifiers, which appear to be nouns and not classifiers, they can argue that true, sortal, classifiers are not in themselves articles and attribute their article-like nature to their movement to D. W&B's faulty interpretation that classifiers are lexical and their inconsistency on whether nouns are mass, as well as their misreading of some facts in Cheng and Sybesma 1999, 2005 and Borer 2005, in the end, only distract from the thrust of their argument.

References

- Borer, Hagit. 2005. *In name only*. Oxford: Oxford University Press.
- Cheng, Lisa Lai-Shen, and Rint Sybesma. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30:509–542.
- Cheng, Lisa Lai-Shen, and Rint Sybesma. 2005. Classifiers in four varieties of Chinese. In *The Oxford handbook of comparative syntax*, ed. by Guglielmo Cinque and Richard Kayne, 259–292. Oxford: Oxford University Press.
- Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6:339–405.
- Croft, William. 1994. Semantic universals in classifier systems. *Word* 45:145–171.
- Doetjes, Jenny. 1996. Mass and count: Syntax or semantics? In *Proceedings of Meaning on the HIL*, 34–52. HIL Occasional Papers in Linguistics 1. Leiden: Holland Institute of Linguistics/Leiden University.
- Gebhardt, Lewis. 2009. Numeral classifiers and the structure of DP. Doctoral dissertation, Northwestern University, Evanston, IL.
- Gil, David. 1987. Definiteness, noun phrase configurationality, and the count-mass distinction. In *The representation of (in)definiteness*, ed. by Eric Reuland and Alice G. B. ter Meulen, 254–269. Cambridge, MA: MIT Press.
- Gil, David. 1994. Summary: Numeral classifiers. *Linguist List* 5, 466. Available at <http://www.umich.edu/~archive/linguistics/linguist.list/volume.5/no.451-500>.
- Löbel, Elisabeth. 1993. On the parameterization of lexical properties. In *The parameterization of Universal Grammar*, ed. by Gisbert Fanselow, 183–200. Amsterdam: John Benjamins.
- Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25:609–665.
- Lyons, John. 1977. *Semantics*. Cambridge: Cambridge University Press.
- Simpson, Andrew. 2005. Classifiers and DP structure in Southeast Asia. In *The Oxford handbook of comparative syntax*, ed. by Guglielmo Cinque and Richard Kayne, 806–838. Oxford: Oxford University Press.
- Stickney, Helen. 2007. From pseudopartitive to partitive. In *Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition North America (GALANA)*, ed. by Alyona Belikova, Luisa

Meroni, and Mari Umeda, 406–415. Somerville, MA: Cascadilla Proceedings Project.
Wu, Yicheng, and Adams Bodomo. 2009. Classifiers \neq determiners. *Linguistic Inquiry* 40:487–503.

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