

Classifiers ≠ Determiners

Yicheng Wu

Adams Bodomo

Cheng and Sybesma (1999, 2005) argue that classifiers in Chinese are equivalent to a definite article. We argue against this position on empirical grounds, drawing attention to the fact that semantically, syntactically, and functionally, Chinese classifiers are not on the same footing as definite determiners. We also show that compared with Cheng and Sybesma's CIP analysis of Chinese NPs (in particular, Cantonese NPs, on which their proposal crucially relies), a consistent DP analysis is not only fully justified but strongly supported.

Keywords: classifiers, open class, definite determiners, closed class, Mandarin, Cantonese

1 Introduction

While it is often proposed that the category DP exists not only in languages with determiners such as English but also in languages without determiners such as Chinese (see, e.g., Pan 1990, Tang 1990a,b, Li 1998, 1999, Cheng and Sybesma 1999, 2005, Simpson 2001, 2005, Simpson and Wu 2002, Wu 2004), there seems to be no consensus about which element (if any) in Chinese is the possible counterpart of a definite determiner like *the* in English. In their influential 1999 article with special reference to Mandarin and Cantonese, Cheng and Sybesma (hereafter C&S) declare that “both languages have the equivalent of a definite article, namely, classifiers” (p. 522).¹ Their treatment of Chinese classifiers as the counterpart of definite determiners is based on the following arguments: (a) both can serve the individualizing/singularizing function; (b) both can serve the deictic function. These arguments and the conclusion drawn from them have been incorporated into C&S 2005, C&S's latest work on the classifier system in Chinese.

In this article, we show that empirically C&S's claim lacks solid foundations and hence cannot be maintained. The article is organized as follows. In section 2, we examine Mandarin

We thank Angela Chan, Alice Chan, Hua Gao, and Yanhong Pan for fruitful discussions. We are grateful to Stephen Matthews for reading the entire draft as well as offering us useful materials and constructive suggestions. We are also grateful to Peter Sells and especially two anonymous *LI* reviewers for their extremely helpful comments on an earlier version of this article. Naturally any remaining errors are our own responsibility.

We gratefully acknowledge funding support from the Research Grants Council of Hong Kong through project HKU725104H.

¹ Traditionally, Chinese linguists do not differentiate classifiers from measure words. Chao (1968:584–620) treats classifiers as individual measures and subsumes them under the rubric of “measure words.” Li and Thompson (1981: 106) state that “any measure word can be a classifier.” Cheng and Sybesma (1999, 2005) refer to both as classifiers, although they make a distinction between count-classifiers and mass-classifiers. Some authors (see, e.g., Matthews and Yip 1994, Huang and Ahrens 2003), following Lyons (1977), use “sortal classifiers” and “mensural classifiers.” In this article, the term *classifier* follows traditional usage, and the term *Chinese* refers to the Chinese language family.

classifiers, whose semantic and syntactic features distinguish them from the definite article in English and which can never serve the deictic function (which C&S take to be the fundamental one performed by D); these classifiers are also not associated with definiteness in any communicative context. In section 3, we examine Cantonese classifiers, on which C&S's claim is mainly based, emphasizing that they are not inherently (in)definite and hence do not denote definiteness by themselves, but come to be associated with definite or indefinite reference. We show that compared with C&S's CIP analysis of Cantonese NPs, a consistent DP analysis is fully justified. Section 4 concludes the article.

2 Classifiers in Mandarin

2.1 *Semantic and Syntactic Features*

First, from a semantic viewpoint, it is inappropriate to treat classifiers in Chinese, at least those in Mandarin, as the equivalent of definite articles, in that the former are contentful morphemes while the latter are functional morphemes. Classifiers are morphemes used to indicate the *semantic* classes of nouns; hence, they often carry information beyond that carried by their associated noun (see Allan 1977, 2001 for general discussion; Zhang 2007 for discussion of Mandarin classifiers). In marked contrast, definite articles are devoid of semantic content and solely contribute definite status to their associated noun (see Lyons 1977, Quirk et al. 1985). As a consequence, the combination of classifiers with nouns is usually subject to selectional restrictions, which do not exist between definite determiners and nouns. In this regard, meaningfulness can be said to be one of the defining properties of classifiers. Thanks to their semantic content, different classifiers can be used with the same noun to create distinct cognitive effects. The Mandarin nouns *shu* 'book' and *mi* 'rice', for example, can collocate with different classifiers in different situations.

- (1) yi ben shu /yi bao shu /yi luo shu /yi xiang shu
 one CL:volume book /one CL:bag book /one CL:pile book /one CL:box book
 'a book/a bag of books/a pile of books/a box of books'
- (2) yi li mi /yi wan mi /yi tong mi /yi guo mi
 one CL:grain rice /one CL:bowl rice /one CL:barrel rice /one CL:wok rice
 'a grain of rice/a bowl of rice/a barrel of rice/a wok of rice'

The semantic features of classifiers encoded in the classification of nouns reflect principles of human perception and cognition (see Aikhenvald 2000, Allan 2001), a fact that has often been argued to offer a unique window into how humans construct and encode representations of the world in their languages (see, e.g., Lakoff 1986). The use of classifiers is characterized by Denny (1986:298, quoted in Aikhenvald 2000:318) as follows: "The noun refers to some kind of mass and the classifier gives a unit of this mass." This is perfectly applicable to Chinese, where the lack of number morphology makes all nouns like mass nouns in needing a unit of measure (see, e.g., Chierchia 1998, Borer 2005). It is no accident that classifiers are always called *dan-wei ci* 'unit word' or *liang ci* 'measure word', whether in traditional or current literature on Chinese.

However, C&S reject Chierchia's (1998) proposal that all nouns in Chinese have mass denotation,² claiming that the mass/count distinction is lexically encoded in Chinese nouns.³

Liquor, rice, and soup do not come naturally in bottles, handfuls, or bowls; instead, they can come in, say, glasses, liters, and cups. Indeed, nouns like this do not *have* a built-in semantic partitioning; that is why they are called mass nouns. . . . Books, people, and pens provide natural units by which they can be counted: individual volumes, persons (one head, one heart, one spine), and pens; this is why nouns like *book*, *person*, and *pen* are called count nouns. (C&S 1999:515)

The purpose of this quotation is to demonstrate our concern that C&S's description of Chinese nouns (and hence their argumentation) is not self-evident, as it appears to be too subjective and hence lacks scientific rigor. We wonder on what objective or scientific criteria things like liquor and soup can be said to come naturally in glasses and cups, but not naturally in bottles and bowls. Is it because things like bottles and bowls came into being or came to China later than things like glasses and cups? Commonsense knowledge says it should be the other way round. The inherent-partitioning claim concerning the distinction between mass and count nouns in Chinese is not convincing,⁴ especially given that different types of classifiers (count-classifiers and mass-classifiers in C&S's terminology; see footnote 1) can occur with the same noun, as illustrated in (1)–(2).

However, this is not the whole (semantic) story. According to Loke (1997), classifier morphemes have undergone a dual process of grammaticalization, in which they first developed predominantly from nouns, and regrammaticalization, in which they are employed to create com-

² Borer (2005) rejects C&S's claim, by defending Chierchia's proposal that all nouns' extensions are mass. She argues further that Chierchia's proposal reflects a fact that is not peculiar to Chinese but that generalizes across all languages.

³ C&S make their claim with respect to the following examples (C&S 1999:514, (10)–(11)):

- (i) a. san ping jiu
three bottle liquor
'three bottles of liquor'
- b. san ba mi
three handful rice
'three handfuls of rice'
- c. san wan tang
three bowl soup
'three bowls of soup'
- (ii) a. san ge ren
three CL people
'three persons'
- b. san zhi bi
three CL pen
'three pens'
- c. san ben shu
three CL book
'three books'

⁴ C&S do mention (1999:515n7) that "arguably, words like 'rice' do have a natural partitioning, namely, grains," lessening confidence in their claim.

pounds.⁵ The classifier morphemes *ben* ‘volume’ in (1) and *li* ‘grain’ in (2), for example, can appear in the compounds in (3)–(4) (from Loke 1997:9).

(3) shu-ben /ke-ben /ju-ben
 book-volume /text-volume /play-volume
 ‘book/textbook/play script’

(4) mi-li /fan-li /sha-li
 rice-grain /food-grain /sand-grain
 ‘(uncooked) rice grain/(cooked) rice grain/sand grain’

Evidently, it is on a semantic basis that speakers have the ability to employ classifiers in enumerating entities and creating compounds. Both processes, grammaticalization and regrammaticalization, are still in progress, as is manifested in creatively using nouns and verbs as classifiers,⁶ or constantly forming compound words out of existing ones that include classifiers in order to meet the increasing demand for new expressions that in turn may require new classifiers. As some researchers (e.g., Zhang 2007) point out, classifiers in Chinese constitute an *open word class*; in this, they differ essentially from definite articles, which form a *closed word class*. This situation is not unique to Chinese; it is found in classifier languages generally (see Aikhenvald 2000:chap. 4). This distinction between classifiers and definite determiners casts further doubt on C&S’s attempt to equate the two, if we assume that there is a deep distinction between lexical and functional categories.

From a syntactic viewpoint, it is also inappropriate to equate classifiers with definite determiners. Classifiers are units of enumeration employed to mark countability; their occurrence makes the semantic partitioning of nouns syntactically visible. Just as English uses grammatical number to indicate the countability of nouns, so Chinese uses classifiers to indicate the countability of nouns, a property that accords with Greenberg’s (1963) hypothesis that languages without grammatical number tend to develop a classifier system. Hence, as Doetjes (1996) suggests,

⁵ Loke (1997:6) uses the term *regrammaticalization* in the sense that some morphemes change from bound classifier morphemes (i.e., they must follow numerals) to bound morphemes in compounds.

⁶ The following examples are adapted from Loke 1997:13, (11)–(14). As can be seen, nouns like ‘pool’ and ‘star’ are used as classifiers in (i), and verbs like ‘brush’ and ‘flash’ as classifiers in (ii).

- (i) a. yi *chi* huanxiao
 one pool laughter
 ‘a pool of laughter’
 b. yi *xing* denghuo
 one star light
 ‘a spark of light’
- (ii) a. yi *mo* yanzi
 one brush rouge
 intended meaning: ‘brushing (one’s face) with a thin touch of rouge’
 b. yi *shan* qing guang
 one flash green light
 ‘a flash of green light’

The Cantonese classifier system also has this kind of openness. See Matthews and Yip 1994 for discussion.

(count) classifiers and number morphology are on the same footing, as they are both syntactic markers of countability. This naturally explains the impossibility in Chinese of any direct allocation of numerals to nouns.

If we emphasize the syntactic behavior of classifiers as counting markers with inherent semantics, we can easily understand the close affinity between classifiers and numerals. In discussing the use of Mandarin classifiers, C&S (1999:530) state a restriction that they note they cannot explain: “In Mandarin, overt classifiers are always accompanied by a Numeral. The Numeral can be overt or nonovert.”⁷ The reason behind this restriction is simple: just as numerals require the presence of number morphology in English, so they require the presence of classifiers in Mandarin because, as discussed above, classifiers are syntactic markers of countability with which numerals are supposed to occur. The syntactic behavior of Chinese classifiers leads Croft (1994) to analyze the numeral and the classifier as one constituent. This constitutes another piece of evidence against equating Chinese classifiers with definite articles, because the latter do not require the presence of numerals.

Following Longobardi (1994:634), who argues that D has the ability to pick out a single instance of whatever is described by NP, C&S (2005:276) claim that Chinese classifiers have the same property: “the classifier singles out one entity from the plurality of entities provided by the semantic representation of the noun in the lexicon; it picks out one instance of what is denoted by N.” Whereas classifiers can be roughly said to serve the singularizing function,⁸ unlike the definite article *the* they are *not* especially created or used for the purpose of picking out a single entity from a set of entities and then determining its unique status in some context. Rather, as Iljic (1994:101–106) points out, a classifier represents an interchangeable *abstract occurrence* (i.e., unit); it is a *counting unit* that makes it possible to extract occurrences. To pick out a single entity, a classifier needs the help of a numeral like *yi* ‘one’ as exemplified in (1)–(2), because it is the latter that expresses a precise, determinate quantity.⁹ The subtle but distinct difference

⁷ Here, *nonovert* refers to the fact that in informal (but not formal) speech, the numeral *yi* ‘one’ in expressions like *yi ben shu* ‘one CL:volume book’ and *yi li mi* ‘one CL:grain rice’ can be omitted.

⁸ As a matter of fact, Mandarin—and Cantonese as well—have a number of classifiers called “generic classifiers” (Matthews and Yip 1994) or “kind classifiers” (Huang and Ahrens 2003). These classifiers do not refer to a discrete physical entity; instead, they categorize different kinds and coerce kind readings from their associated nouns, as shown in (i)–(ii) (adapted from Huang and Ahrens 2003:363).

(i) *yi zhong gou*
one CL:kind dog
‘a kind of dog’

(ii) *san kuan xin che*
three CL:line new car
‘three lines of new cars’

Classifiers such as those in (i)–(ii) select a *kind* or *type* (or “a broad class” in Huang and Ahrens’s words), rather than a *single instance*, of the entity denoted by a noun.

⁹ As C&S (1999:530) note, Mandarin classifiers must occur with a numeral like *yi* ‘one’ even in the presence of a demonstrative. The demonstratives *zhe/na* ‘this/that’ in Mandarin have the variants *zhei/nei*, which have been analyzed as the demonstrative form plus the numeral *yi* ‘one’ (i.e., *zhei* = *zhe* + *yi* and *nei* = *na* + *yi*). These two variants can only be used when a classifier is present, not alone: *zhei ben shu* ‘this.one CL:volume book’/ *nei li mi* ‘that.one CL:grain rice’.

between the classifier as a unit and ‘one’ as a numeral has been discussed by Greenberg (1990: 172), who stresses that ‘‘unit counting is to be distinguished from ‘one’ as a numeral although the connection between the two is a close one.’’

To amplify the point that classifiers perform individualization/singularization, C&S go as far as to claim that although in English an indefinite singular NP of the form [*alan*-N] can be construed as referring to a kind, in Chinese a corresponding noun phrase of the form [*yi*-CL-N] (with *yi* meaning ‘one’) cannot, for two reasons: (a) ‘‘although [*yi*-CL + N] is often translated as ‘a(n) N’, it in fact has the interpretation ‘one N’’; (b) ‘‘crucially, given the presence of the classifier, the kind-denotation is already ‘suppressed’’ (1999:534). This claim is easily falsified. It is possible to construct many examples like those in (5), where an indefinite singular NP of the form [*yi*-CL-N] is interpreted universally, rather than otherwise.

- (5) a. *Yi jia feiji de sudu bi yi sou lunchuan de sudu kuai.*
 one CL plane ’s speed than one CL ship ’s speed fast
 ‘An airplane’s speed is faster than a ship’s.’
- b. *Yi ge zhanshi yao suishi zhunbei wei guo xisheng ziji.*
 one CL soldier should anytime prepare for country sacrifice self
 ‘A soldier should prepare to sacrifice himself anytime for his country.’
- c. *Yi wei hao laoshi bu jinjin jiao xuesheng zenme xuexi.*
 one CL good teacher not just teach student how study
 ‘A good teacher doesn’t just teach students how to study.’

2.2 (*Lack of*) *Deictic Function*

Having discussed the drawbacks of C&S’s proposals from semantic and syntactic perspectives, let us consider whether it is plausible from a functional viewpoint to equate Mandarin classifiers with definite determiners. C&S’s central thesis that a classifier phrase (CIP) in Chinese is the equivalent of a DP in English is based on the following assumption:

D has an individualizing or singularizing function. . . . This function, we think, is connected to the similar, though not identical, assumption that D has the function of mediating between the description (predication) provided by the NP and whatever specific entity in the real world the description is applied to. This function, perhaps a discourse function, we will refer to as the *deictic function* of D. (C&S 1999:513)

Given this assumption, they make the following suggestion and assertion:

In languages with articles/determiners, the deictic function in the nominal phrase is taken care of by the article/determiner. However, this should not lead one to conclude that if a language has no articles/determiners, no element performs the deictic function. If the describing/referring dichotomy is indeed part of Universal Grammar, then if a language has no articles/determiners, some other element in the

Also, it is worth mentioning that contra C&S, Wu (2004) treats Mandarin classifiers, the general classifier *ge* ‘individual’ in particular, as indefinite determiners. However, she states in two footnotes that it is actually *yi ge* ‘one CL: individual’ rather than the classifier alone that is an indefinite determiner corresponding to English *alan*.

language must perform the deictic function. We suggest that in Chinese Cl^0 performs some of the functions perform by D^0 , including the deictic function. (C&S 1999:518)

The deictic function of D and Cl is in some ways related to their ability to pick out singular instances of whatever is denoted by N . (C&S 1999:535)

It is clear from these three quotations that C&S take deictic function to be a key property of D , the head of the functional category DP . This stance is made clearer in their later work: ‘‘its deictic property—the property to be able to refer at all’’—is ‘‘a more fundamental property of the DP domain’’ (2005:277); ‘‘we found that there is one fundamental function to be performed by a functional head in the nominal domain: the deictic function. The lexical NP describes, the functional head *deictically* refers’’ (2005:280; emphasis added).¹⁰ C&S hold that this deictic property of D is shared by classifiers in languages without articles/determiners such as Chinese, which leads them to propose that Cl , the head of a functional projection CIP , is equivalent to D . One question here, as a reviewer notes, is whether it is really correct to propose, as C&S do, that determiners are deictic in nature. Determiners such as *the* are not really deictic elements, unlike demonstratives, which also exist in Chinese (C&S are not claiming that classifiers are demonstratives since classifiers and demonstratives regularly cooccur in Chinese and are not in complementary distribution: indeed, in both Mandarin and Cantonese a demonstrative usually requires a classifier to follow). As the reviewer further points out, a deictic property is not commonly assumed to characterize determiners (as opposed to properties of familiarity and uniqueness of reference, which C&S do not discuss).¹¹ However, as the many quotations from C&S 1999 presented here show, C&S do consistently claim a deictic function for classifiers in Chinese. This attribution of a deictic-referring property to determiners and then to classifiers (we will examine this shortly) calls into question the validity of the classifier-as-determiner proposal.¹² In what follows, we discuss whether the so-called deictic property of determiners—the ability to deictically refer—is mirrored in Mandarin classifiers.

C&S’s suggestion that the elements performing the deictic function in Chinese are classifiers is apparently blind to another fact: that if there are elements in Chinese that must perform such a function, the first candidate that must be mentioned should not be classifiers but demonstratives.

¹⁰ In discussing the functions of D that motivate them to equate classifiers with definite determiners, C&S cite Szabolcsi’s (1994) distinction between two D s/determiners in Hungarian, each having a different function: one has the subordinator function (meaning that it marks the NP as a possible argument), and ‘‘the other has the function of a quantifier/demonstrative’’ (C&S 1999:535). They accept Szabolcsi’s suggestion that these two functions may be borne by one morpheme in languages such as English. They therefore take the two functions, the argument-marking property and the deictic-referring property, as the basic ones performed by determiners and shared by classifiers, the latter being more fundamental.

¹¹ We thank the reviewer for suggesting to us and helping us to elaborate on the issues concerning C&S’s assumptions and assertions about the key property of determiners that they claim is shared by classifiers.

¹² Although it seems that sometimes C&S intend their term *deictic function* to generally mean the ability of determiners to refer (2005:277), not just the deictic function associated with demonstratives, the former cannot exclude the latter. Indeed, C&S do take determiners to have the function of demonstratives (see footnote 10), which is perhaps why they assert that ‘‘the functional head *deictically* refers’’ (2005:280). In any event, the use of such a term to describe and characterize determiners can cause confusion (as shown by a reviewer’s concern in this regard). For the sake of convenience, we still use this term in the sense that C&S intend, that is, to denote the ability of determiners to deictically refer, a sense that may overlap somewhat with the deictic-referring function of demonstratives.

As is well known, demonstratives invariably, if not exclusively, exercise the deictic referring function in all varieties of Chinese. As for classifiers in Mandarin, they can never perform the deictic function. For a bare [CI-N] phrase in Mandarin to have the same interpretation as a [*the*-N] phrase in English, for instance, it must combine with a demonstrative plus the numeral *yi* ‘one’, as shown in (6), where *nei* and *zhei* are the suppressed forms of the demonstratives *na* ‘that’ and *zhe* ‘this’ and the numeral *yi* (see footnote 9). For a bare [CI-N] phrase in Mandarin to have the same interpretation as an [*a/an*-N] phrase in English, it must combine with the numeral *yi* ‘one’, as shown in (7), where the numeral can be omitted (see footnote 7).

- (6) a. (**Nei*) ben shu women dou duguo.
 that CL:volume book we all read
 ‘As for the/that book, we have all read it.’
 b. (**Zhei*) li mi you duo zhong?
 this CL:grain rice have much weight
 ‘How much does the/this grain of rice weigh?’
- (7) a. Wo yao mai (yi) ben shu.
 I want buy one CL:volume book
 ‘I want to buy a book.’
 b. Ni bizi shang you (yi) li mi.
 you nose on have one CL:grain rice
 ‘There is a grain of rice on your nose.’

Sentences like those in (6)–(7) reveal that classifiers in Mandarin do not have the deictic function attributed to D by C&S; hence, a bare [CI-N] phrase is not a referring expression at all. Thus, we can formulate the following generalization regarding the use of such [CI-N] phrases in Mandarin:¹³

- (8) In Mandarin, a bare [CI-N] phrase cannot deictically refer unless it combines with a demonstrative plus a numeral (e.g., *yi* ‘one’, which is prone to suppression), a combination that invariably gives rise to a definite meaning.

¹³ Here we are talking about the default interpretation of nominal expressions in Mandarin. In an appropriate context, indefinite NPs as well as bare NPs can also receive a definite interpretation, especially when they appear in subject position, as illustrated in (i)–(ii).

- (i) Liang ge laoshi dou hen lei.
 two CL teacher all very tired
 ‘The two teachers were both tired.’
 (ii) Laoshi ming nian yao tuixiu.
 teacher next year will retire
 ‘The teacher will retire next year.’

This is due to the definiteness constraint on NP subjects in Chinese (we should note that this is a topic-prominent language). That is, in Chinese, nominal expressions of any form in subject position receive a definite interpretation (see Chao 1968, Li and Thompson 1981). This constraint is applicable to all varieties of Chinese, including Cantonese (as will be shown in the next section). Because of the specific focus of this article, we will not discuss simple NPs such as bare nouns and complex NPs such as those containing relative clauses.

The facts discussed above (which, we should note, are not exhaustive) lead us to conclude that Mandarin classifiers are not equivalent to a definite article, whether semantically, syntactically, or functionally. In the next section, we will examine classifiers in Cantonese, focusing on their functional properties.

3 Classifiers in Cantonese

3.1 Association with (In)definite Reference

In discussing the deictic function purported to be shared by determiners and classifiers, C&S (1999, 2005) seem to use Cantonese as a representative of Chinese in general, which is misleading. In their 1999 work, when they claim that both Mandarin and Cantonese have the equivalent of a definite article, they simply discuss the association of Cantonese classifiers with definite interpretation, without probing whether Mandarin classifiers have the same or a similar property. In their 2005 work, when they claim that “in Chinese the classifier does many things that determiners do in other languages” (p. 279), again, they discuss only a small set of Cantonese data, and they do not mention whether Mandarin classifiers display the same or similar behaviors. Therefore, we first examine whether classifiers in Cantonese have the property of definiteness and hence can deictically refer.

C&S’s classifier-as-determiner proposal is largely based on their observation that the deictic function performed by D in languages with determiners is taken care of by classifiers in Cantonese (2005:280). Their evidence comes from sentences like (9)–(10) (taken from Matthews and Yip 1994:89, quoted in C&S 1999:521; parenthesized material added), in which a [Cl-N] phrase can appear in subject position and receive a definite interpretation.

- (9) a. (*Go*) di ce zo-zyu go ceothau.
 that CL car block-CONT CL exit
 ‘The cars are blocking the exit.’
 b. (*Ni*) di leotsi jiu hou lek sin dak.
 this CL lawyer need very smart only-okay
 ‘The lawyers had better be very smart.’
- (10) a. (*Go*) gaa ce zo-zyu go ceothau.
 that CL car block-CONT CL exit
 ‘The car is blocking the exit.’
 b. (*Ni*) go leotsi jiu hou lek sin dak.
 this CL lawyer need very smart only-okay
 ‘The lawyer had better be very smart.’

This patterning might lead one to conclude that classifiers in Cantonese are inherently definite, like the definite article *the* in English, and hence can indicate definiteness regardless of context. However, this is not true. Actually, the definite interpretation of a classifier phrase is contextually constrained; namely, it arises (a) when the referent has already been mentioned in the discourse context (note that this is the typical case of anaphoric reference); (b) if not, the

referent must be close by, so that the hearer can easily identify the referent (we will describe such cases as *ostensive reference*; see Berckmans 1990).¹⁴ For example, (9)–(10) are only appropriate when some car(s) and some lawyer(s) has (have) already become the topic of conversation (i.e., both the speaker and the hearer already know about the referent(s) before these utterances are made), or when both the speaker and the hearer see some car(s) (e.g., while walking together) or lawyer(s) (e.g., while watching TV together).¹⁵ Otherwise, a word like *jau* ‘exist, have’ would have to be used before the classifier phrase, as shown in (11) (also from Matthews and Yip 1994: 89).

- (11) Jau (jat) gaa ce zo-zyu go ceothau.
 have (one) CL car block-CONT CL exit
 ‘There is a car blocking the exit.’

Now, are the pragmatic conditions constraining the use of bare classifier phrases in Cantonese applicable to definite determiners like *the* in English? Whereas condition (a) above is certainly applicable to *the*, condition (b) is not. For example, if the potential referent associated with some noun has not been established in the communicative context, English speakers would use a demonstrative rather than the definite determiner, even if the referent is close by. For instance, a father can point to a boy nearby and say ‘‘That boy is my son,’’ but not ‘‘The boy is my son,’’ if the set in the denotation is limited (e.g., there is one boy and one girl). The situation described here at least shows that Cantonese classifiers and the definite article *the* are not used in the same way. Most importantly, it should be stressed that a demonstrative can always be added to the classifier phrase with a definite interpretation, and the result is still perfectly felicitous, as indicated in (9)–(10). This linguistic fact goes unmentioned in C&S 1999, 2005; in a significant way, therefore, these works are not descriptively adequate.

Classifier phrases in Cantonese can appear and receive a definite interpretation not only in subject position, but in object position as well, as (12) and (13) illustrate.

- (12) Keoi maai-zo gaa ce.
 he sell-ZO CL car
 ‘He sold the car.’
 (C&S 1999:524, (25b))
- (13) Wufei jam-jyun wun/di tong la.
 Wufei drink-finish CL^{bowl}/CL^{PL} soup SFP
 ‘Wufei finished the soup.’
 (C&S 2005:270, (24b))

¹⁴ By *ostensive reference*, we simply mean that the referent denoted by the classifier phrase is manifestly demonstrative.

¹⁵ Without an appropriate context, examples such as (9)–(10) would seem very abrupt to native speakers. Also, some of our Cantonese informants indicate that when the relevant referents (i.e., some car(s) or lawyer(s)) are mentioned for the first time, even if these referents are close by, they would prefer to use a demonstrative before the classifier-noun sequence, rather than a bare classifier phrase.

The definite interpretation of the classifier phrase in object position is equally restricted by the two conditions associated with the classifier phrase in subject position. For example, (12)–(13) are only appropriate when the hearer already knows that a third person owned a car (and only one car), and that a person called Wufei was served a particular bowl of soup or some particular soup, before the speaker utters these sentences. Otherwise, they may not be assigned a definite reading, because the bare classifier *gaa ce* in (12) can also be understood as ‘a car’ so that the sentence means ‘He sold a car’, and *wun/di tong* in (13) ‘a bowl of soup/some soup’ so that the sentence means ‘Wufei finished a bowl of soup/some soup’. Without a pragmatic context, bare classifier phrases should be avoided because they are ambiguous, unlike noun phrases with *the* like those in the English translations of (12)–(13). To disambiguate these sentences, a demonstrative like *ni* ‘this’ or *go* ‘that’ (to express the definite meaning) or the numeral *yat* ‘one’ (to express the indefinite meaning) should be used.¹⁶

It should be clear from the examples and discussion above that unlike [*the*-N] phrases in English, whose definite interpretation is clearly indicated by the determiner, the definite interpretation of [CI-N] phrases in Cantonese is contextually determined (see also Pacioni 1998). We therefore conclude that *the definite interpretation of a Cantonese [CI-N] phrase is supported by the pragmatic context, rather than indicated by the classifier itself.*

It should also be stressed that we have been talking about the situation in informal speech. In formal speech,¹⁷ a demonstrative is obligatorily used, which is similar to the use of the numeral *yi* ‘one’ in Mandarin in that the latter can be absent in informal speech but must be present in formal speech (see footnote 7). Example (14) is a campaign slogan adopted by Donald Tsang when running in February 2007 for his second term as Chief Executive of the Hong Kong SAR Government. Although the reference of the object NP is clear to all voters, it is desirable to use the demonstrative in this case.

- (14) Ngo jiu zou hou nei fan gung.
 I want do well this CL job
 ‘I’ll get the job done.’

Descriptively, the difference between Cantonese and Mandarin should be clear. In Mandarin, the numeral *yi* ‘one’ is optional with indefinite [CI-N] phrases in informal speech (see (7)). In Cantonese, this is also the case; in addition, the demonstrative is optional with definite [CI-N] phrases. The crucial question now is, are classifiers in Cantonese equivalent to a definite article, if those in Mandarin are not, as concluded in section 2?

¹⁶ One may ask why a classifier phrase in subject but not in object position can invariably receive a definite interpretation. This can be easily accounted for by the definiteness constraint on NP subjects in Chinese (see footnote 13). According to Chao (1968:396), since the subject position has definite reference, the definite interpretation of Cantonese [CI-N] phrases like those in (9)–(10) is simply implied by position; in addition, Chao considers Cantonese [CI-N] phrases with a definite reading as instances of omitting the demonstrative (1968:555).

¹⁷ We recorded a morning news broadcast in Cantonese on ATV (Hong Kong, 23 October 2007) and found that all the classifier phrases were used either with a demonstrative or with a numeral like *yat* ‘one’, even though the pragmatic context was transparent enough.

If [CI-N] phrases *invariably* had a definite interpretation like [*the*-N] phrases in English, we would have good reason to treat classifiers in Cantonese as the equivalent of a definite article. The variation shown above in interpreting classifier phrases—sometimes as definite and sometimes as indefinite—strongly suggests that even Cantonese classifiers are not equivalent to a definite article, for they do not have the intrinsic property of definiteness and hence do not indicate definiteness by themselves (recall that their primary function is to measure), but come to be associated with definite or indefinite reference (see also Simpson 2005).

Given the observations and discussion above, we can formulate the following generalization regarding the use of [CI-N] phrases in Cantonese:

- (15) In Cantonese, a [CI-N] phrase cannot deictically refer unless (a) it combines with a demonstrative, a combination that invariably gives rise to a definite reading; (b) it is placed in a transparent context that supports a definite interpretation (derived by anaphoric or ostensive reference).

The generalization in (15) captures not only the difference between classifiers in Cantonese and those in Mandarin, but also the difference between classifiers in Cantonese and the definite determiner *the* in English: it is *the*, but not classifiers in Cantonese, that can *denote* definiteness by itself, *regardless of context*.

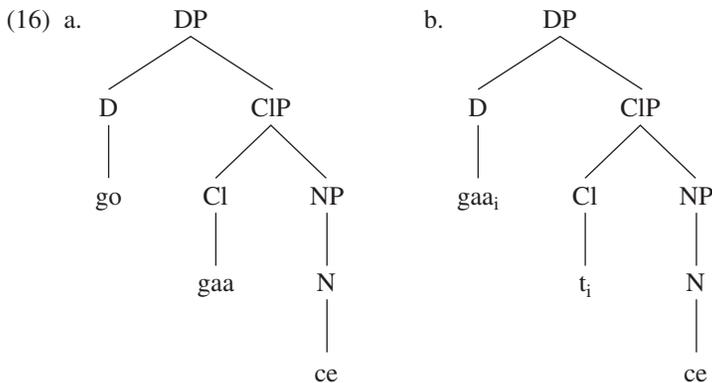
3.2 A DP Analysis of Classifier Phrases

Similar phenomena also occur in other southern Chinese dialects, in which [CI-N] phrases with a definite interpretation have been found to have the same distribution as [Dem-CI-N] phrases and have been considered to be instances of omitting the demonstrative (see, e.g., Shi and Liu 1985, Yang 1988, Chen 1992, Wang and Gu 2006). The question now is how to analyze the bare [CI-N] phrase in Cantonese. We seem to have two alternatives here. The first one is straightforward, as proposed in Chao 1968. In this classic work on Chinese grammar, Chao (p. 396) considers Cantonese [CI-N] phrases with a definite interpretation in sentences such as (9)–(10) and (12)–(13) to be an abbreviated form of [Dem-CI-N] ([D-M-N] in Chao's own terms since he treats classifiers as measure words, as mentioned in footnote 1). At a later point in the same book (p. 555), Chao explicitly states that definite [CI-N] phrases in Cantonese are cases where the demonstrative is omitted (as mentioned in footnote 16). In Chao's analysis, therefore, it is still due to the deictic property of the demonstrative, not the classifier, that a classifier phrase can receive a definite interpretation.

We explore a second alternative in this article, supposing that the definite reading of a bare [CI-N] phrase may not be necessarily related to an invisible demonstrative. As discussed above, unlike the English definite article, which is inherently definite, classifiers in Cantonese do not indicate definite reference by themselves. Nonetheless, this does not mean that they have nothing to do with reference. Given that a bare classifier phrase can be interpreted referentially (as definite or indefinite) in the communicative context, classifiers are certainly related to the reference of the nominal expressions containing them. The question is, how does this association with referring

function come about? The answer should be clear from our discussion in section 3.1: they add the reference function with the help of the pragmatic context.

One question that naturally arises then is how to represent nominal expressions in Cantonese, especially those of the form [Cl-N] associated with a definite reading. If we follow the claim made by many scholars (see, e.g., Stowell 1989, Longobardi 1994, Szabolcsi 1994) that only DPs can function as arguments, a plausible analysis is that like an argumental nominal phrase in English, a [Cl-N] phrase, whether in subject or object position, has the structure of a DP, rather than being a CIP projection without a dominating DP, as proposed by C&S. Thus, Cantonese NPs with a definite interpretation (surface: [Dem-Cl-N], [Cl-N]) such as *go gaa ce* ‘that CL car’ and *gaa ce* ‘CL car’ have the structures in (16) (irrelevant details omitted). In (16a), D is instantiated by an overt demonstrative, which accommodates the first alternative as proposed in Chao 1968. In (16b), D is filled by a classifier via movement, as suggested in Simpson 2005.¹⁸



(16) shows that definiteness is still the property of D, not Cl, and it reflects the fact that classifiers, while unable to indicate definiteness by themselves, may be associated with the deictic function by moving to D and being combined with it.¹⁹ This is consistent with the work of several scholars (e.g., Pan 1990, Tang 1990a,b, Li 1998, 1999, Simpson 2005), who propose a DP for nominal expressions in Chinese and take demonstratives as instances of D, as demonstratives invariably have the [+definite] feature whether in Mandarin, Cantonese, or other varieties of Chinese. This also complies with Lyons’s (1999) argument that DP is “Definiteness Phrase” and D is the position that hosts definite articles, demonstratives, and strong quantifiers.

As regards indefinite NPs (surface: [Num-Cl-N], [Cl-N]), C&S (1999, 2005) propose that they have a NumeralP projection ([NumeralP[Numeral[CIP[Cl[NP]]]]]), in which ‘the numeral appar-

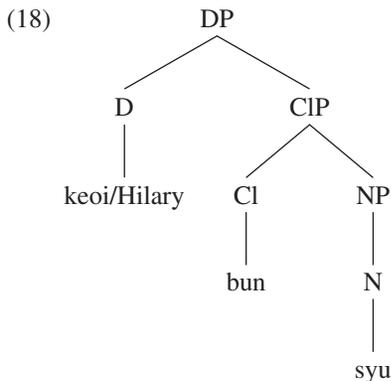
¹⁸ Although Simpson (2005:824) suggests that bare classifier structures in the Southeast Asian languages, including Cantonese, may be regular DPs resulting from raising the classifier from Cl to D, he does not give adequate reasons for justifying this Cl-to-D approach (which is one of the main tasks of this article). Moreover, he considers this movement approach “slightly different” from C&S’s Cl=D proposal. For us, rather, the former is *essentially* different from the latter, for the crucial reason that we have stressed here: unlike definite determiners, classifiers do not have the intrinsic property of definiteness; instead, they are associated with (in)definite reference in the pragmatic context.

¹⁹ We are grateful to a reviewer for helping us clarify this.

ently has the effect of undoing the definiteness'' (1999:528). To show consistency with their claim that classifiers are equivalent to a definite article like *the*, they explain that ''‘A book’ in Chinese languages is literally ‘[one [the book]]’’ (2005:284). Apart from the other problems discussed in this article, in this proposal the position of the head CI appears to be too low. With a demonstrative *nilgo* ‘this/that’, numeral phrases such as *yat bun syu* ‘one CL book’ and *saam gaa ce* ‘three CL car’ can always become definite (e.g., *nilgo (yat) bun syu* ‘this/that book’ and *nilgo saam gaa ce* ‘these/those three cars’), which suggests that definiteness is higher than CIP (see also Gebhardt 2007). Therefore, indefinite Cantonese NPs in argument position should also have the DP projection. For example, in (11), repeated here as (17), the indefinite CIP *gaa ce* ‘CL car’ can be construed as projecting a DP whose empty head is lexically governed by *jau* ‘exist, have’.²⁰

- (17) Jau (jat) gaa ce zo-zyu go ceothau.
 have (one) CL car block-CONT CL exit
 ‘There is a car blocking the exit.’

One of the bonuses of a DP analysis is that it can be extended to Cantonese possessive constructions. In Cantonese, as well as in other southern dialects (see, e.g., Zhao 2003, Shi 2004), a possessive often takes the form [NP₁-CI-NP₂]: for example, *keoi/Hilary bun syu* [he/she/Hilary CL:volume book] ‘his/her/Hilary’s book’, *nei/Jennifer deoi haai* [you/Jennifer CL:pair shoe] ‘your/Jennifer’s shoes’, and *ngo/Maria go hoksaang* [I/Maria CL:individual student] ‘my/Maria’s student’. The functional structure of a Cantonese possessive like *keoi/Hilary bun syu* can thus be represented as in (18), where D is occupied by a pronoun or a proper name, which fits well with Li’s (1999) proposal that takes pronouns and proper names to be instances of D.



Such constructions might not necessarily be a problem for C&S’s CIP analysis, if one assumes that a possessor occupies Spec,CI, parallel to the option of having a possessor in Spec,D. However,

²⁰ As argued by Longobardi (1994), a null D, like other empty categories, must be properly governed, and the default interpretation of a null D is an existential operator.

an analysis of this sort can only be maintained under the condition that classifiers denote definiteness inherently, which has been shown not to be the case. In the communicative context, the proper name as well as the pronoun in these constructions can also be omitted and the resulting phrase of the form [CI-N] can still be interpreted as definite. In this case, the DP analysis still works—that is, via movement of CI to D. The DP analysis can be further demonstrated with noun phrases more complex than any of the examples that C&S use to argue for a CIP (and against a DP) analysis.²¹ For reasons of space, however, we will not expand on this any further, as we have provided enough evidence that noun phrases in Cantonese (as well as Mandarin) should have (more or less) the same DP projection as those in languages such as English, rather than a CIP projection without a dominating DP.

4 Concluding Remarks

In summary, a broad range of linguistic facts leads us to conclude that neither Mandarin nor Cantonese classifiers are the equivalent of a definite article. Mandarin classifiers are essentially different from definite determiners. Like Mandarin classifiers, Cantonese classifiers primarily serve the classifying function, their prototypical function; unlike definite determiners, they do not indicate definiteness by themselves, but can be associated with definite or indefinite reference.

Before closing this article, let us answer a relevant question posed by C&S (2005:279): ‘‘If Universal Grammar incorporates a describing-referring dichotomy and D takes care of the referring deictic function in the nominal domain, what happens in languages that don’t have determiners?’’ Our answer is that in Chinese, some elements (such as demonstratives) can invariably serve the referring deictic function, and other elements (such as classifiers in Cantonese) can be associated with the referring function (via the pragmatic context), aside from the describing function (via their inherent semantics). This is also why we consider a consistent DP analysis for Chinese noun phrases fully justifiable.

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²¹ Here we provide the structural representation only of classifier phrases in Cantonese. For the structural analysis of Chinese nominal expressions as a whole, see the relevant references cited in this article.

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Department of Linguistics
University of Hong Kong
Pokfulam Road
Hong Kong, PRC

yicheng@hku.hk
 abbodomo@hku.hk