A General Theory of Bare "Singular" Kind Terms

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Abstract

Dayal's (2004) theory of kind terms accounts for the definiteness and number marking patterns in kind terms in many languages. Brazilian Portuguese has been claimed to be a counter-example to her theory as it seems to allow bare "singular" kind terms, which are predicted to be impossible according to her theory. However, the empirical status of the relevant data has not been clear so far. This paper presents a new data point from Singlish and confirms the existence of bare "singular" kind terms. A revised theory of kind terms is proposed that accounts for it. The proposed theory puts forth a number system with three basic categories, i.e. singular, plural and general. It is claimed that bare "singular" kind terms are in fact derived from general NPs, which are associated with number-neutral properties. The paper also discusses why bare "singular" kind terms are not perfectly acceptable in Brazilian Portuguese.

1. Introduction

1.1. Previous studies on kind terms

Kinds can be derived by either the nominalisation operator $\cap$ (Chierchia, 1998) or the ι-operator (Dayal, 2004). ι is only available as a repair operation if $\cap$ is undefined. It has been assumed that $\cap$ is defined for pluralities, but not for singularities. (1) summarises how kinds are derived in Dayal's (2004) system.

(1) Dayal's (2004) system

Plural	Singular
objects	**objects**
$\downarrow \cap$	$\downarrow \cap$
kinds	undefined
	$\downarrow \iota$
	kinds

This system accounts for the contrast between plural and singular kind terms in English as shown in (2). While plural kind terms do not take the definite article *the*, singular kind terms require it. This is because only ι, but not $\cap$, is lexicalised by the definite article in English.

(2) a. {Ø/*The} dinosaurs became extinct.
b. {The/*Ø} dinosaur became extinct.

However, the forms of kind terms vary across languages. Thus, Dayal argues that the lexicalisation patterns of $\cap$ and ι vary cross-linguistically. She claims that there are four possible patterns as shown in (3). 'D' in the table means that the relevant operator is lexicalised by definite articles. '(D)' means that the use of definite articles is optional. 'Ø' means that the relevant operator applies freely, that is, its application is not signalled overtly.

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(3) Possible lexicalisation patterns

	ι	$\cap$	Singular kind terms	Plural kind terms	Languages
a.	D	D	D NP	D NP	Italian, French
b.	D	(D)	D NP	(D) NP	German
c.	D	Ø	D NP	NP	English
d.	Ø	Ø	NP	NP	Hindi, Russian

Cross-linguistic variations are limited to the four patterns in (3) because the theory makes the following two assumptions. The first assumption is the Blocking Principle, which states that a type-shifting operation (e.g. ι, $\cap$) cannot apply covertly if it is associated with an overt morpheme (Chierchia, 1998). The definite article in kind terms becomes optional when the relevant operator is exempt from the Blocking Principle. Secondly, it is assumed that ι, but not $\cap$, is the basic function of definite articles. Thus, if the Blocking Principle is relevant to only one of the operators that are lexicalised by definite articles, it is ι rather than $\cap$ that adheres to the principle. Hence, while German-type languages, where the definite article is optional for plural kind terms but obligatory for singular kind terms, are expected to exist, the reverse of the German pattern, where the definite article is optional for singular kind terms but obligatory for plural kind terms, should not exist (4a). Furthermore, in order for the Blocking Principle to be meaningful at all, it should not be possible that the definite article is optional in both singular and plural kind terms (4b). Since the basic function of definite articles is ι, languages in which only $\cap$ is lexicalised by definite articles should be ruled out too (4c).

(4) Impossible lexicalisation patterns

	ι	$\cap$	Singular kind terms	Plural kind terms
a.	(D)	D	(D) NP	D NP
b.	(D)	(D)	(D) NP	(D) NP
c.	Ø	D	NP	D NP

1.2. Brazilian Portuguese: A counter-example?

Dayal's theory has advanced our understanding of the relation between the forms and the interpretive mechanism of kind terms as it clearly demarcates the boundary between possible and impossible kind terms in natural languages. However, she also notes that there are languages in which those patterns occur which her theory predicts as being impossible. One such language is Brazilian Portuguese. Brazilian Portuguese encodes ι with definite articles. Thus, Dayal's system predicts that the definite article is obligatory for singular kind terms, though it could be either optional or absent for plural kind terms. More generally, bare singular kind terms are not allowed in languages with definite articles. However, Brazilian Portuguese has been claimed to allow bare singular kind terms.

(5) %(O) panda logo estará extinto.
the panda soon will.be extinct
'Pandas will soon become extinct.' BRAZILIAN PORTUGUESE

What complicates the matter is that the empirical status of bare singular kind terms in the language remains unclear as indicated by the '%' sign (Schmitt & Munn, 1999, 2002; Müller, 2002; Dobrovie-Sorin & Pires de Oliveira, 2008; Ionin et al., 2011). This empirical unclarity makes us wonder whether our theory of kind terms should include bare singular kind terms as an option available for languages with definite articles.

In the rest of this paper, I will first demonstrate that bare singular kind terms are an option available for natural languages and thus need to be accounted for by any adequate theory of kind terms (section 2). I will then propose an analysis of the forms of kind terms that allows bare singular kind terms (section 3). It will be shown that the empirical unclarity of bare singular kind terms in Brazilian Portuguese is in fact something expected in the system I propose (section 4). Section 5 concludes the paper.

2. New data point: Singlish

Like Brazilian Portuguese, Singlish (Colloquial Singapore English) also encodes ι with a definite article. However, unlike Brazilian Portuguese, the empirical status of bare singular kind terms is very clear. They are not only acceptable but preferred to their counterparts with the definite article.

(6) (The) dinosaur extinct already.
'The dinosaur became extinct.' SINGLISH

Therefore, it can be said that bare singular kind terms are an available option for languages with definite articles. It is then necessary to revise Dayal's theory so that it can accommodate data with singular kind terms like (5) and (6). It is also necessary to identify the factor leading to the difference in acceptability between singular kind terms in Brazilian Portuguese and in Singlish.

3. A revised theory of kind terms

3.1. The basic ideas[1]

I argue that the problem of Dayal's system lies in its assumption about the basic nominal number system rather than the way in which it derives kinds from objects.[2] In particular, Dayal assumes that the basic number system consists of two categories, i.e. the singular and the plural. I claim that there are *three* basic number categories for nominals: singular, plural and general. The general is associated with number-neutral properties.

Now, there being three basic number categories implies that there are three types of kind terms rather than just two. Specifically, we now have to think about kind terms derived based on general NPs, i.e. general kind terms. Do they exist? If so, how are they derived? Following Chierchia (1998), Dayal (2004) assumes that $\cap$ is the default kind-generator and that it is only defined for pluralities, but not for singularities. The reason is that an entity whose realisations are always singularities is not entitled to be called a kind. If such a reasoning is justified, why is it that $\cap$ is not undefined for pluralities for a similar reason? That is, the realisations of the putative kind, derived based on pluralities, will never be singularities (alone) or empty. It is conceptually more plausible to think that kinds are not tied to the number of their realisations. Therefore, I claim that $\cap$ is only defined for number-neutral properties, but not for plural as well as singular ones. That is to say, general kinds exist and they are derived by the application of the $\cap$ operator. ι now is also available for pluralities. In Dayal's system, when ι is applied as a repair option, the result denotes the maximality in the [kind] domain.[3] Thus, the application of ι to pluralities results in the largest sum of more than one [kind] individuals, i.e. subkinds. (7) summarises how (sub-)kind terms are derived in the revised system.

(7) The proposed system

General	Plural	Singular
objects	**objects**	**objects**
$\downarrow\cap$	$\downarrow\cap$	$\downarrow\cap$
kinds	undefined	undefined
	$\downarrow\iota$	$\downarrow\iota$
	subkinds	**kinds**

[1] See Nomoto (2010) for a lengthier discussion of the ideas presented in this and the next subsection.

[2] By 'basic nominal number system' I mean the semantic categories relating to number that are universally available ('basic') for 'nominals'. More detailed number categories such as the dual and the paucal are thought to be subcategories of one of the basic number categories, usually of the plural. I consider the number categories employed in the verbal agreement system distinct from those employed in nominals. This, I imagine, is one of the sources of 'number mismatch' phenomena.

[3] I assume that the domain of individuals consists of the [object] and the [kind] subdomain. Dayal calls the latter the 'taxonomic' domain. I will not use this term because it might give a wrong impression that the relevant subdomain is structured according to a taxonomic hierarchy. The reality is that only some nodes in the [kind] subdomain have corresponding nodes in a taxonomic hierarchy.

3.2. Evidence: Classifier languages

Classifier languages encode the three basic number categories distinctly, and hence they provide a test bed for the proposed system in (7). First, morphologically bare NPs represent the general number. They may be used to refer to either singular or plural entities. General NPs denote kinds:

(8) *Dinosaur* telah pupus.
dinosaur PERF extinct
'Dinosaurs became extinct.' MALAY

Second, classifier languages normally possess plural markers. In Malay, the plurality of referents is indicated by reduplication (for all count nouns). Plural NPs denote subkinds rather than kinds:

(9) Ada di antara *dinosaur-dinosaur* yang pupus pada masa itu.
be at among dinosaur.PL that extinct at time that
'Among the dinosaurs there were also some (subspecies) which went extinct at that time.'
MALAY

Lastly, [classifier NP] constituents denote singular objects. This fact is observed only in the so-called 'bare classifier' languages, i.e. languages in which classifiers can occur without numerals. An example is given below from Cantonese:

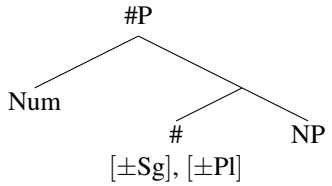
(10) *Zek gau* zungji sek juk.
CLF dog like eat meat
'The dog likes to eat meat.' CANTONESE (Cheng & Sybesma, 1999)

The singular reference of the [classifier NP] constituent can be only inferred indirectly in languages in which classifiers cannot occur without numerals. Suppose that the meaning of the [numeral [classifier NP]] structure is calculated compositionally in a parallel manner as complex cardinals such as *three hundred* (cf. Ionin & Matushansky, 2006). Specifically, the meaning is calculated by multiplying the cardinality of the referent of [classifier NP] by the number represented by the numeral, just as the meaning of *three hundred* is calculated by multiplying 100 by 3. Since 'three CLF book' refers to three books, but not 6, 9, . . . , 3n books, the cardinality of the [classifier NP] portion must be 1. Thus, it can be concluded that numeral classifiers are in fact singular number morphology[4].

According to the proposed system (7), singular NPs denote kinds. However, as seen in (10), bare classifier ('classifier + NP') constructions do not. There is an independent reason for this. Cross-linguistically, bare classifier constructions tend to be interpreted as definite (Simpson et al., 2011). This suggests that the construction makes use of ι to generate a definite interpretation (presumably accompanied by the movement of the classifier to D), which is thought to prevent the use of ι as a substitute of $\cap$.

3.3. Formal implementation
3.3.1. Basic morphosyntax and semantics

I assume the syntactic structure in (11) for the part of a noun phrase where number is expressed.

(11)


This structure is a minimum one. It does not posit special functional heads for either numerals or classifiers. Numerals occur in the specifier of #P. Classifiers are a type of number morphology. Hence,

[4]In this connection, Cheng & Sybesma (1999:536) suggest that 'in Chinese the classifier is the locus of grammatical number'.

they occupy the # head.

The # head hosts two number-related features: [±Sg] and [±Pl]. These two features have both morphological and semantic reflections. With regard to morphology, the positive value indicates the presence of the relevant marking while the negative one its absence. There are four possible number marking patterns as shown in (12).

(12) a. [+Sg], [−Pl] ↔ singular marking (no plural marking)
b. [−Sg], [+Pl] ↔ plural marking (no singular marking)
c. [+Sg], [+Pl] ↔ singular and plural marking
d. [−Sg], [−Pl] ↔ no marking

One might wonder if the combination of [+Sg] and [+Pl] (12c) is possible. There are at least two ways of realising these features. The first way is to realise [+Sg] and [+Pl] as separate morphemes, specifically as a classifier and a plural marker respectively. This happens in Japanese and Yucatec Maya (Butler et al., 2011), for example.[5]

(13) gakusei-tati san nin[6]
student-PL three CLF
'three students' JAPANESE

Another way is to realise the two features as a single morpheme. Such morphemes are sometimes called 'plural classifiers'. Plural classifiers are found in bare classifier languages such as Cantonese and Bengali.

(14) di hoksaang
CLF.PL students
'the students' CANTONESE

As for the semantic reflection, the values of the two features determine the denotation of the [# NP] constituent. The denotation for the four feature combinations and their descriptive categories are given in (15).[7]

(15)

	Features	Denotation	Description
a.	[+Sg], [−Pl]	singularities alone	Singular (SG)
b.	[−Sg], [+Pl]	pluralities alone	Plural (PL)
c.	[+Sg], [+Pl]	singularities and pluralities (= number-neutral)	General 1 (GN1)
d.	[−Sg], [−Pl]	neither singularities alone nor pluralities alone = singularities and pluralities (= number-neutral)	General 2 (GN2)

Notice that the denotations of [+Sg], [+Pl](15c) and [−Sg], [−Pl] (15d) are identical.

3.3.2. Cross-linguistic variations

Not all languages are like classifier languages, which encode the three basic number categories distinctly. Languages may (morphologically) collapse one category with another. Moreover, some languages appear to lack the category of General 2 ([−Sg], [−Pl]). I suppose that in such languages, the relevant features are encoded lexically rather than syntactically, arguably due to the complexity involved in the calculation of the denotation compared to General 1 (see (15d) above). Lexical items with inherent General 2 features are what Chierchia (2010) dubs 'fake mass nouns' such as *furniture* and *footwear*, which are conceptually count but have distribution of genuine mass nouns such as *water* and

[5]The combination of a classifier and a plural marker is ungrammatical in some languages, e.g. Mandarin and Armenian (Borer, 2005).

[6]See Watanabe (2006) for how this word order is derived.

[7]The denotation is subject to a further change if a numeral is introduced into the structure. For instance, while [[$_{\#}$ CLF] NP] and [[$_{\#}$] NP] are singular ([+Sg], [−Pl]) and number-neutral ([−Sg], [−Pl]) respectively, [three [[$_{\#}$ CLF] NP]] and [three [[$_{\#}$] NP]] are both plural.

air.[8] Languages can be classified into four types according to the way the basic number categories are collapsed and whether General 2 is active in the syntax. The four types are shown in the first column of the table in (17) below. The second to fourth columns of the table show the morphological marking patterns for each number category in each type. The markedness hierarchy in (16) is assumed concerning the morphological realisations of the basic number categories. 'α/A' means that feature α is realised as A.

(16) *[+Pl]/∅ ≫ *[+Sg]/∅

The hierarchy says that [+Pl] is more marked than [+Sg], and hence it is the category with [+Sg] that is realised as a morphologically unmarked form. The unmarked categories for each type are indicated in boldface in the table.

(17)

	Type	SG	GN2	GN1	PL	Languages
a.	SG : **GN2** : GN1 : PL	NP_{SG}	NP	$NP_{SG.PL}$	NP_{PL}	classifier languages
b.	**SG/GN2** : GN1/PL	NP	NP	NP_{PL}	NP_{PL}	Br. Portuguese, Singlish
c.	**SG** : GN1/PL	NP	—	NP_{PL}	NP_{PL}	all languages listed in (3)
d.	**SG/GN2/GN1/PL**	NP	NP	NP	NP	Malagasy, Dene

The cross-linguistic variations with regard to the forms of kind terms are much greater than previous theories (e.g. Dayal, 2004) allow because for each of the four types in (17), there are four possible patterns of encoding the kind-generating operators $\cap$ and ι in (3). English belongs to the 'SG : GN1/PL' type (17c), which collapses General 1 and Plural. The so-called "plural" nouns in English with the suffix *-s* may entail the general number; the pure plural meaning is obtained pragmatically (e.g. McCawley, 1968; Krifka, 1989; Sauerland, 2003; Zweig, 2009). A question like *Do you have cats?* can be answered by *Yes, one* but not by *No, only one*. Thus, the so-called bare "plurals" are actually bare "generals." This explains why bare plurals in English can denote kinds. Bare plurals are neither singular nor plural. Hence, $\cap$ is defined for them.

4. Brazilian Portuguese and Singlish

4.1. Deriving bare "singular" kind terms

We have seen in section 2 that bare "singular" kind terms as found in Brazilian Portuguese and Singlish are an option available for natural languages. According to the revised theory of kind terms proposed in the last section, bare "singular" kind terms are indeed available as one of the many possible forms of kind terms in natural languages. This section demonstrates this point, using Brazilian Portuguese and Singlish as examples.

In the traditional conception of number with the singular-plural dichotomy, the unmarked NPs in these languages are considered to be "singular." However, it is known that they can be number-neutral in both languages (Schmitt & Munn, 2002; Gil, 2003; Kim et al., 2009), which indicates that they are actually ambiguous between Singular and General 2. That is to say, the basic number system of these languages is of type 'SG/GN2 : GN1/PL'. Singular and General 2 NPs are morphologically unmarked whereas General 1 and Plural NPs come with plural morphology. The fact that the definite article is optional in "plural" (as well as "singular") kind terms in these languages suggests that the two kind-generating operators are lexicalised in the same way as in German in (3), i.e. the definite article is obligatory for ι and optional for $\cap$. (18) shows how the proposed system (7) derives kind terms in

[8] Since General 2 nouns are bare NPs in classifier languages, the present study endorses Chierchia's (1998) original insight, which compares mass nouns in languages like English and Italian to bare NPs in classifier languages. However, as proven in the numerous papers written in response to Chierchia (1998), the comparison does not hold true because, contrary to the fact, it implies that there is no morphological singular-plural distinction in classifier languages (e.g. Chung, 2000). I should point out here that Chierchia's comparison is valid if it is only concerned with fake mass nouns. In my analysis, genuine mass nouns are different from fake ones in that the former do not have atoms and hence lack the number features altogether. The presence of atoms is a precondition for the use of the number features because the features refer to parts of the complete join semi-lattice structure with atoms (Link, 1983).

languages of this type.

(18)

Category:	General 1 ($\mathrm{NP_{PL}}$)	General 2 (NP)	Singular (NP)
Derivation:	**objects**	**objects**	**objects**
	$\downarrow \cap$	$\downarrow \cap$	$\downarrow \cap$
	kinds	**kinds**	undefined
			$\downarrow \iota$
			kinds
Form:	(D) $\mathrm{NP_{PL}}$	(D) NP	D NP
	"plural"	"singular"	"singular"

Kind terms with plural morphology are derived not from Plural NPs but from General 1 NPs by means of $\cap$.[9] The definite article is optional here. Kind terms that have been traditionally regarded as "singular" are derived from either General 2 or Singular NPs. The definite article is optional for those "singular" kind terms which are derived from General 2 NPs because they are derived by $\cap$. On the other hand, the definite article is obligatory for those "singular" kind terms which are derived from Singular NPs because they are derived by ι. When the two types are seen as a whole, the definite article of "singular" kind terms appears to be optional. Summing up, the definite article is optional not only in "plural" kind terms but also in "singular" kind terms. This is exactly the situation observed in languages like Brazilian Portuguese and Singlish. Thus, the proposed system allows bare "singular" kind terms as one of the possible options available in natural languages.

4.2. On the (un)stability of bare "singular" kind terms

Although bare "singular" kind terms are an available option, there is a difference in their acceptability between Brazilian Portuguese and Singlish. While they are doubtlessly acceptable in Singlish, their empirical status is not so clear in Brazilian Portuguese. The unclear empirical status of bare "singular" kind terms in Brazilian Portuguese has been sometimes ascribed to the speakers' awareness of the formal variety of the language, in which bare "singular" kind terms are ungrammatical (Ionin et al., 2011). However, I believe that the influence of the knowledge of the formal variety is trivial, if any, because not only Brazilian Portuguese but also Singlish speakers are conscious of the fact that the definite article cannot be omitted in the formal/standard variety of the respective languages. Therefore, the reason must to be sought elsewhere.

I claim that the difference between the two languages arises because when recovering the number features of NPs (#P to be more precise), speakers can associate 'D NP' forms with General 2 NPs in Singlish, but not in Brazilian Portuguese. In the recovered system of the latter, all "singular" kinds are derived from Singular NPs with features [+Sg], [−Pl], and hence the definite article is obligatory. Since the grammar of Brazilian Portuguese itself derives kind terms from General 2 NPs, in which case the definite article is optional, a contradiction arises between what the grammar allows and what is possible in the recovered system. This is why Brazilian Portuguese speakers are uncertain about whether the definite article of bare "singular" kind terms can be omitted.

Let us now see in more detail how the number features of NPs are recovered from the surface noun phrase form 'D NP'. To begin with, it is necessary to understand how determiners and NPs interact. The key data is given in (19). The data shows that the number-neutrality of General 2 NPs disappears when they are modified by a determiner. When Generanl 2 NPs are used without a determiner, they are number-neutral (19a). However, when they are accompanied by a determiner as in (19b), the number-neutrality disappears and only singular reference is possible. In order to refer to plural entities, the plural form as in (19c) must be used.

[9] In section 3.3.1, it was argued that NPs with the so-called plural classifier *di* in Cantonese represents the General 1 category with the features [+Sg], [+Pl]. According to Au-Yeung (2007), besides bare NPs, which are categorised into General 2 ([−Sg], [−Pl]), NPs with *di* can also denote kinds. Therefore, Cantonese supports the proposed system in (18).

(19)

	BRAZILIAN PORTUGUESE	SINGLISH	
a.	cachorro	dog	'one or more than one dog'
b.	o/este cachorro	the/dis dog	'the/this dog', *'the/these dogs'
c.	os/estes cachorros cf. *o/este cachorros	the/dis dogs	'the/these dogs', *'the/this dog'

The phenomenon is not surprising in Brazilian Portuguese because the determiners in (19b) are in the singular forms. However, in Singlish, the forms of the determiners are invariant regardless of number. *The* and *dis* 'this, these' can be used regardless of the number of the NPs to which they are attached. Thus, if *dog* is number-neutral, it is expected that *the/dis dog* is also number-neutral.

What the data in (19) suggests is that determiners are lexically specified for number and the number system used for this purpose is the singular-plural dichotomy, lacking the 'general number' category. In terms of features, they only have the $[\pm\text{Pl}]$ feature. General 2 NPs lose their number-neutrality when combined with determiners because the $[\pm\text{Sg}]$ feature either gets deleted or becomes invisible (20a). This process is thought to happen in order for the concord between the determiner and the # head to take place successfully. The number-neutrality is retained when no determiner with its own number specification is present in the structure and the number features of the # head percolate up to D (20b).

(20) a. *the dog*: $[_{\text{DP}}\ \text{the}_{[-\text{Pl}]}\ [_{\#\text{P}}\ \#_{[\not{\pm}\not{\text{Sg}}],[-\text{Pl}]}\ [_{\text{NP}}\ \text{dog}]]]$ (singular)

b. *dog*: $[_{\text{DP}}\ \text{D}_{[-\text{Sg}],[-\text{Pl}]}\ [_{\#\text{P}}\ \#_{[-\text{Sg}],[-\text{Pl}]}\ [_{\text{NP}}\ \text{dog}]]]$ (number-neutral)

Since determiners only have the $[\pm\text{Pl}]$ feature, they do not determine the value of the $[\pm\text{Sg}]$ feature of #P/NPs. Having said that, they imply the value of the $[\pm\text{Sg}]$ feature. The following two implicational relationships should hold.

(21) a. $[-\text{Pl}] \Rightarrow [+\text{Sg}]$
b. $[+\text{Pl}] \Rightarrow [-\text{Sg}]$

I claim that (21a) is invoked in the recovery process in Brazilian Portuguese (at least by some speakers), but not in Singlish, probably because the nominal concord system is more complex in the former. The inference when recovering the number features of #P/NPs proceeds as shown in (22).

(22)
1. 'D NP'
2. NP is unmarked. $\rightarrow [+\text{Sg}]$, $[-\text{Pl}]$ or $[-\text{Sg}]$, $[-\text{Pl}]$
3. D is the singular form. $\rightarrow [-\text{Pl}]$
4. (i) SINGLISH
   Both $[+\text{Sg}]$, $[-\text{Pl}]$ (Singular) and $[-\text{Sg}]$, $[-\text{Pl}]$ (General 2) are compatible.
   $\rightarrow$ D can be optional. = (18)
   (ii) BRAZILIAN PORTUGUESE
   Given '$[-\text{Pl}] \Rightarrow [+\text{Sg}]$', only $[+\text{Sg}]$, $[-\text{Pl}]$ (Singular) is compatible.
   $\rightarrow$ D is obligatory. $\neq$ (18)

As can be seen in (22–4), in Brazilian Portuguese, kind terms of the form 'D NP' are not associated with General 2 NPs in the system recovered by the speakers although they should be according to the grammar in their minds (18). It is such a mismatch that degrades the acceptability of bare "singular" kind terms in Brazilian Portuguese. By contrast, no such mismatch occurs in Singlish. Bare "singular" kind terms are not only acceptable, but even preferred to the form with the definite article. The preference makes sense because bare "singular" kind terms are more unmarked compared to definite "singular" kind terms. The former is derived from General 2 NPs by the default kind-generating operator $\cap$ whereas the latter is derived from Singular NPs by using ι as a repair option.

5. Conclusion

Dayal (2004) claims that languages with definite articles do not allow bare singular kind terms. Although Brazilian Portuguese and Singlish pose problems for her claim, the claim is still valid. This is so because bare "singular" kind terms exist, but they are actually not singular but general, more

specifically General 2. This paper showed that the nominal number system consists of not two but three basic categories, including the general. They are expressed by the combination of two binary features [±Sg] and [±Pl], giving rise to four different feature combinations: [+Sg], [−Pl] (Singular); [−Sg], [+Pl] (Plural); [+Sg], [+Pl] (General 1); [−Sg], [−Pl] (General 2). Classifier languages are often described as lacking number distinction (Greenberg, 1972; Sanches & Slobin, 1973; Chierchia, 1998). However, contrary to this popular belief, they turn out to be the type of languages that have the finest basic number distinction. I claimed that the number system at work in determiners is the singular-plural dichotomy. Then, languages have to reconcile the tension/mismatch between the different feature systems within a DP: [±Pl] for determiners (D) vs. [±Sg] and [±Pl] for nouns (#). The fact that classifier languages generally lack definite articles as found in languages such as English and Italian can be understood in this connection. The reconciliation is not possible without losing the distinction between two number categories that are distinguished by the values of the [±Sg] feature, i.e. Singular ([+Sg], [−Pl]) vs. General 2 ([−Sg], [−Pl]) and Plural ([−Sg], [+Pl]) vs. General 1 ([+Sg], [+Pl]).

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