

Towards an alternative analysis of the generic object construction in Chinese^{*}

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ABSTRACT

Much of the literature on Chinese objects focuses on the prevalent phenomenon of topic-drop, whereby the topic of discussion, known to both speaker and interlocutor, is phonetically deleted, resulting in a referential null object (Huang 1984). What has not been paid as much attention is the generic object construction, wherein a non-referential, generic interpretation appears to be achieved transitively, through the use of a generic object. This paper examines Cheng and Sybesma (1998)'s analysis of the generic object construction, which centers on their claim that the generic object is inserted so as to block *pro* and thereby yield a non-referential interpretation. New data are introduced to establish a descriptive analysis of the possible transitivity patterns in Chinese, in relation to the appropriate syntactic and pragmatic contexts in which these patterns are found. Finally, it is proposed that there are factors other than referentiality that are involved in governing the use of the generic object construction in Chinese.

1. INTRODUCTION

1.1 THE GENERIC OBJECT CONSTRUCTION

The literature on Chinese null objects is extensive, but lacks a uniformly agreed upon consensus as to the exact nature of the null object, and the referential properties assigned to it. Much of the research has been devoted to the phenomenon of topic-drop, whereby the topic of discussion, known to both speaker and interlocutor, is topicalized and subsequently phonetically deleted, resulting in the referential null object, as in (1) (Huang 1984). The verb is interpreted as taking a referential object, and the gap is interpreted as having referential properties (Cheng & Sybesma 1998).

- (1) John, wo yijing jian guo le *e*
 John, I already meet PERF *e*
 'John, I already met'

Less understood is the generic object in Chinese. Many verbs that are commonly used intransitively in English appear with generic objects in Chinese, yielding non-referential readings, as in (2).

- (2) Lisi zai chang ge
 Lisi PROG sing song
 'Lisi is singing' (lit. 'Lisi is singing-song')

^{*} I would like to thank Yves Roberge for his help, guidance, and valuable feedback. All errors are my own.

The verbs that appear with generic objects are generally the Chinese equivalents of optionally transitive verbs in English. The following verbs can be used intransitively (without an overt object) in English, but in Chinese, frequently appear with a specific ‘generic’ object.

Table 1 (Cheng & Sybesma 1998)

English	Mandarin
drink	he-dongxi ‘drink-thing=drink’
eat ^[1]	chi-fan ‘eat-rice=eat’
read	kan-shu ‘read-book=read’
sing	chang-ge ‘sing-song=sing’
study	nian-shu ‘study-book=study’
speak	shuo-hua ‘speak-speech=speak’
teach	jiao-shu ‘teach-book=teach’
write	xie-zi ‘write-character=write’
drive	kai-che ‘drive-car=drive’
move	ban-jia ‘move-house=move’
run	pao-bu ‘run-step=run’
skate	liu-bing ‘slide-ice=skate’
walk	zou-lu ‘walk-road=walk’

As seen in (3), the generic object and the referential null object are in complementary distribution, with the generic object being used only in non-referential contexts, and the referential null object only in referential contexts.

- (3) wo zai du (*shu) zhe ben shu
 I PROG read(*book) this CL book
 ‘I am reading this book’

To achieve a non-referential reading with the same verb, a generic object must be inserted:

- (4) wo zai du shu
 I PROG read book
 ‘I am reading’

The following section reviews Cheng & Sybesma (1998)’s analysis of the construction and introduces some issues that may bring the analysis into question.

1.2 CHENG & SYBESMA (1998)

Cheng & Sybesma (1998) offer a simple solution, based on the assumption that the null object in Chinese is referential *pro*, referring to something specific or definite. They propose that in order to achieve a non-referential reading in Chinese, a generic dummy object must be inserted so as to block referential *pro*. In the following sentence, the object gap must be

^[1] My data show that the generic object for eat is *dongxi* ‘thing’ rather than *fan* ‘rice’, which is more often used to refer to dinner, or a meal.

interpreted as referring to a specific, referential item, ie. a particular book that has already been mentioned, or is visible:

- (5) wo zai du e
 I PROG read e (e=pro)
 'I am reading'

As clearly stipulated in their analysis, this proposal hinges on the assumption that if a verb allows a null object, any time it projects an empty object slot, this null element must be interpreted as *pro*. The problem is in fact much more complicated than this analysis would indicate, partially because it is not decisively agreed upon that a null object in Chinese must automatically be analyzed as *pro*, and also because there are data that suggest that the empty object may not necessarily be restricted to a referential interpretation. In the next section, I will introduce some problems with this analysis.

2. PROBLEMS WITH THE EXISTING ANALYSIS

2.1 THEORETICAL ASSUMPTIONS

Despite the great abundance of literature on the referential null object in Chinese, there is no uniformly agreed upon consensus as to the precise nature of the object. While Cheng & Sybesma (1998) assume the *pro* analysis, there are several other equally valid analyses for the Chinese null object. Huang (1984, 1987, 1991) analyzes the empty category as a variable. Qu (1994) analyzes it as a null element that alternates between variable and *pro*. Taking a fairly different stance, Xu (1986) proposes that Chinese has but one empty category, the Free Empty Category, which can assume particular properties depending on the context in which the object is found. Each analysis of the null object attributes particular syntactic and referential properties to the empty category, and the analysis that one chooses to accept for the null object may affect what properties might be attributed to the overt generic object. If it is indeed true that the two are in complementary distribution, one might expect to find certain properties that are also present in complementary distribution. What is needed is a definitive, unified account of the referential null object in Chinese. Until this is achieved, it is preferable to have an analysis of the generic object that will still hold in the event that a particular analysis of the referential null object does not.

2.2 VARIATION IN ACTUAL DATA

A further complication is the fact that the data are not as straightforward as previously assumed, as two possible object forms have been overlooked. According to Cheng & Sybesma's analysis, there are two transitivity patterns in Chinese. The verb can appear with either a null object or an overt generic object.

Table 2: Transitivity patterns in Chinese

	Object
Referential	\emptyset_i
Non-referential	N_{generic}

According to previous analyses, the overt generic object is used exclusively in non-referential contexts, and the referential null object is used exclusively in referential contexts. In fact, the data are more complicated than these assumptions allow. It is in fact perfectly acceptable to use an overt object in a referential context, as in (6), and conversely, to achieve a non-referential reading with a null object, as in (7).

- (6) ru guo ni chi mian, wo jiu chi fan
 if you eat noodle, I then eat rice
 ‘If you eat the noodles, I’ll eat the rice’
- (7) bu yong le, xia xia, wo yi jing chi-guo le e
 not necessary, thanks, I already eat PERF
 ‘No thank you, I already ate’

Chinese therefore is not restricted to two possible object forms or transitivity patterns. Nevertheless, there is a marked preference for each context. The null object occurs more frequently in referential contexts, and the overt object is preferred in non-referential contexts. This lack of arbitrary decision-making suggests that certain factors are influencing the choice that native speakers make among the four options.

In actual discourse, verbal constructions vary tremendously depending on the discourse context. Pragmatics may be found to play a role in the transitivity patterns that speakers choose to use. Previous analyses have often ignored the effect of discourse and syntactic contexts (beyond making the referential vs. non-referential distinction).

2.3 SEMANTIC NATURE OF GENERIC OBJECT

Cheng & Sybesma (1998) suggest that the generic object is void of meaning and does not contribute anything semantically to the construction. It is merely a syntactic dummy and acts as nothing more than a placeholder. I will introduce data that show that the generic object, while unable to take on referential properties, is able to make a semantic contribution.

The next section will detail the data that I have collected to shed light on the transitivity patterns in Chinese and the possible forms that the objects of transitive verbs may take.

3 DATA ANALYSIS

To confirm my intuitions that the data are much more complex than Cheng & Sybesma’s analysis would predict or allow for, I decided to elicit actual data to establish what possible object forms exist in Chinese, and in which contexts these forms are found.

3.1 PARTICIPANTS

The data come from fourteen L1 speakers of three dialects of Chinese (Mandarin, Cantonese, and Chaozhou). Most speakers were bilingual, with Chinese as their first language and English as their second. The majority defined themselves as equally dominant in both languages.

Table 3: Participants

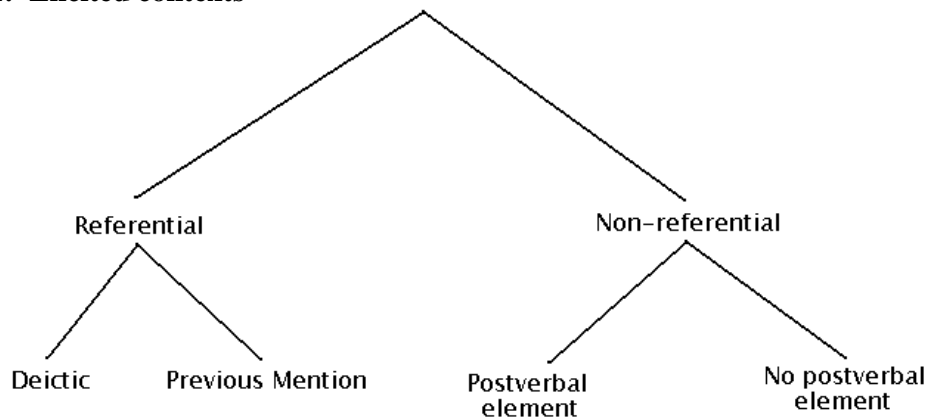
L1	Number of speakers	Other languages spoken?
Mandarin	2	Bilingual (Chinese/English)
Cantonese	10	Bilingual (Chinese/English)
Chaozhou	2	Multilingual (Chinese, English, Vietnamese)

Because of small numbers of non-Cantonese speakers, I have collapsed the data from all three dialects because I have found them to be syntactically identical in terms of their VP structure.

To elicit verbal use, I asked the participants to construct sentences that conveyed the meaning of the situation I gave them (examples are given in the next section). The prompts were given in English and the responses in Chinese. All responses were transcribed.

3.2 ELICITED CONTEXTS

The verbal usages of eight verbs (*run, eat, drive, sing, study, read, walk, draw*) in varying discourse and syntactic contexts were elicited through what was essentially a translation task, although participants were generally not given a word-for-word prompt; rather they were given a situation and asked how they would communicate certain phrases. Some examples are found in Table 4.

Figure 1: Elicited contexts**Table 4: Elicited contexts and examples**

	Context	Example sentence
Referential	Deictic	<i>(holding out a book)</i> Read \emptyset_i .
	Previous mention	<i>(What happened to the cake?)</i> I ate \emptyset_i .
Non-referential	Postverbal element	She is singing (song) to the baby.
	No postverbal element	She is singing (song).

I made the first division in the data to establish if there was an effect of referentiality on the type of object used. Within the referential condition, I wanted to establish whether there was a difference between the object having a deictic referent or a linguistic antecedent. Within

the non-referential condition, I wanted to see whether the presence of a postverbal element (other than the object) would have an effect on the type of object used.

I included the referential condition with the sole intention of confirming the existing theoretical analyses that describe Chinese as using mostly null objects to refer to referential or previously mentioned referents. This condition contained 121 tokens. I examined the non-referential condition in more detail so that I could more specifically study the generic object construction. This condition contained 513 tokens in total.

The results are given in the following sections.

3.3 GENERAL OBSERVATIONS

Based on previous analyses and the current theory, one would expect exclusive use of the null object in referential contexts and exclusive use of the overt generic object in non-referential contexts. However, the data are not categorically divided. There is not simply an all-or-nothing condition on the usage of the generic object. While there is clearly a preference for each construction depending on the context, there are other factors at play, such as the presence of an additional postverbal element.

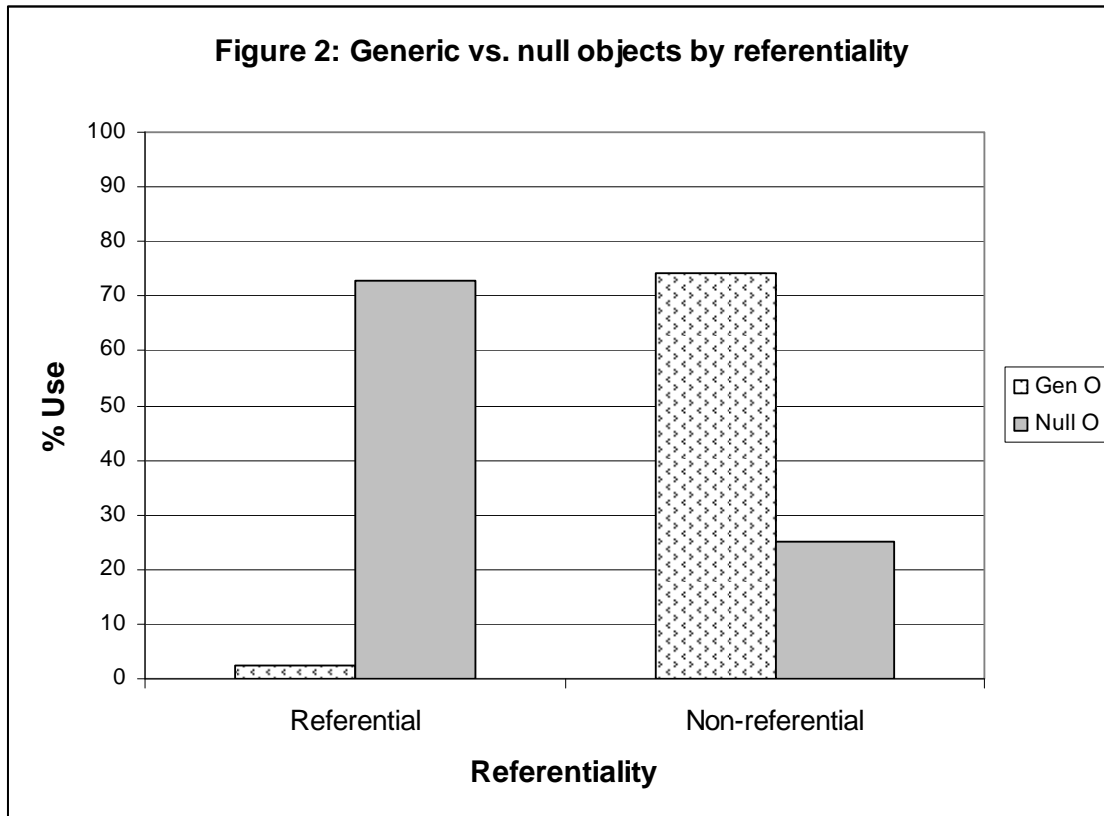
Table 5 contains the rates of use of four different object types depending on the syntactic and referential context.

Table 5: % use of various object forms by context					
	Generic Object	Null Object	Lexical DP	Pronoun	Total
Referential	2.48	72.73	16.53	8.26	100% (121)
Non-referential	74.27	24.95	0.78	0.00	100% (513)
Referential: Deictic	4.88	46.34	36.59	12.20	100% (41)
Referential: Previous mention	1.25	86.25	6.25	6.25	100% (80)
Non-referential: Postverbal AdvP/PP/AspP	46.54	52.53	0.92	0.00	100% (217)
Non-referential: No postverbal element	94.59	4.73	0.68	0.00	100% (296)

The next few sections will look at each condition in more detail.

3.4 REFERENTIALITY

The first factor that I wished to examine was referentiality. I expected this to play a very large role in speakers' decisions to use either the generic object or the null object. Previous analyses predict a very robust division between the referential and non-referential conditions in terms of generic object use. According to the theory, subjects should drop the object in referential contexts and use the generic object in non-referential contexts. I therefore expected more generic objects in the non-referential contexts, but variability within each condition. Figure 2 shows the rates of generic and null object use in the referential and non-referential conditions.



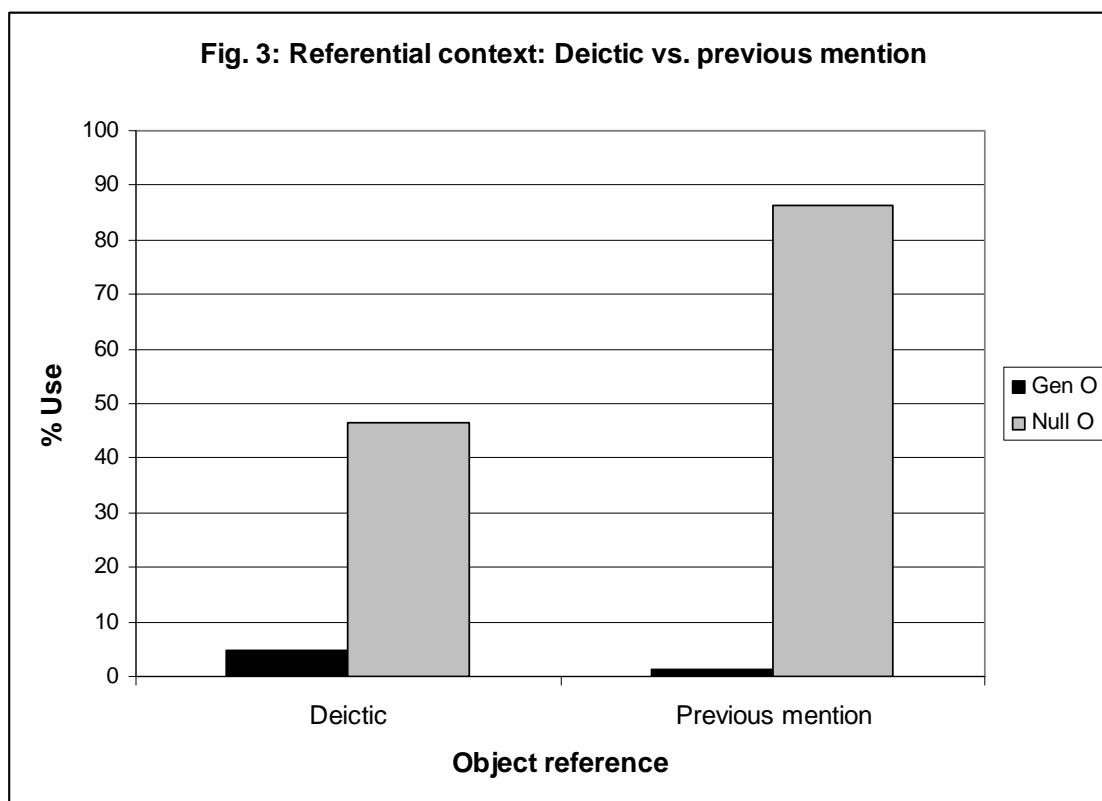
The greatest factor in whether or not speakers use a generic object appears to be referentiality. Use of the generic object in the referential constructions is almost negligible, at 2.5%. In contrast, the generic object is used in 74.27% of the non-referential constructions. Speakers clearly prefer null objects in referential contexts.

The referential verbal construction appears to be fairly straightforward in Chinese. An object that has been previously mentioned, or that has a pragmatically or deictically apparent referent, normally gets topicalized and phonetically deleted, resulting in the null object. When the null object is not used, speakers can repeat a previously mentioned object as a lexical DP, at the risk of sounding redundant. This happens when a speaker wishes to be particularly informative, descriptive, or is using a more formal register. Less frequently used is the overt pronoun.

A closer examination of the referential condition can be found in the next section.

3.5 REFERENTIAL CONDITION

Within the referential condition, I further divided the data by whether the object had a deictic referent or a linguistic antecedent. In the deictic condition, the object was understood to be visible to both the speaker and the interlocutor. In the Previous Mention condition, the object had a linguistic antecedent. I did not expect any large differences between the two conditions, since both contain referential contexts.



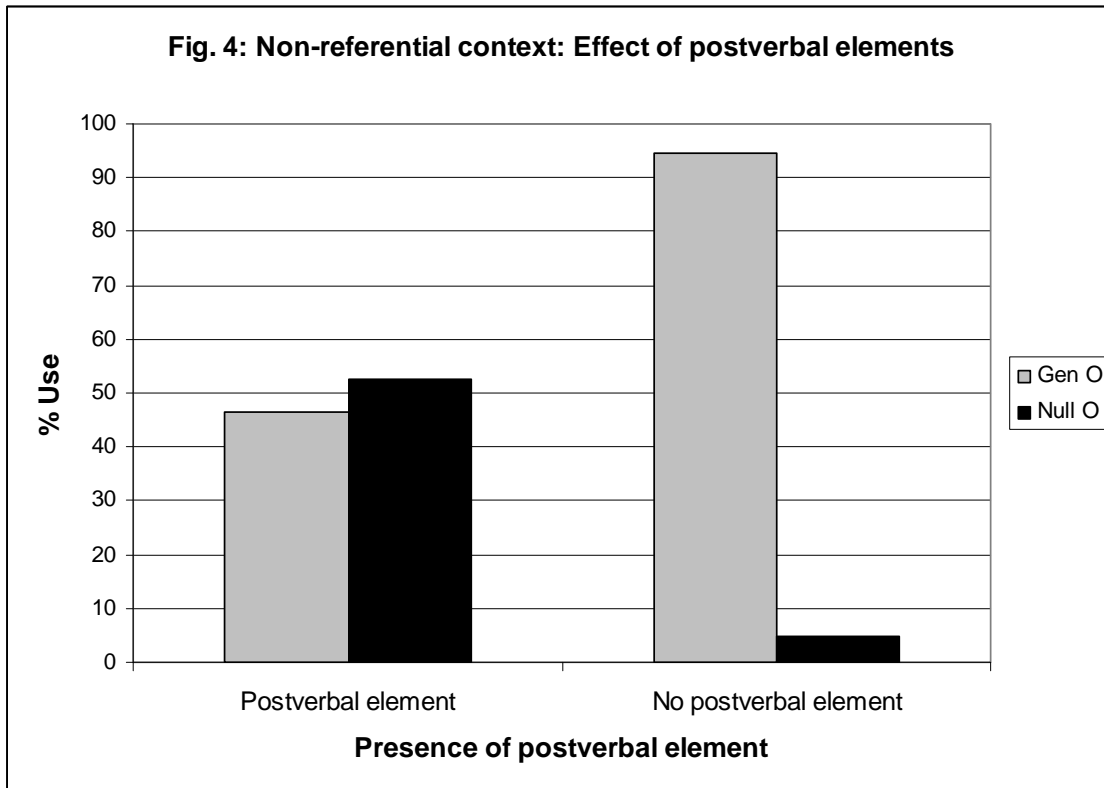
Within the referential contexts, there is a greater use of overt objects in the deictic condition. This is not necessarily an unexpected result. An object with a linguistic antecedent is the clearest case of a referential object being topicalized and phonetically deleted. Conversely, in the case of an object that is pragmatically apparent but which has no linguistic antecedent, it is more or less up to the speaker to judge whether it is necessary to pronounce the object. This optionality is reflected in the rates of null vs. overt object use, which hover around 50%.

It is also worth noting that the null object is behaving like a pronominal element, or the Chinese equivalent of the English pronoun. As in English, there is less use of this pronoun (Chinese null *pro*) in the deictic condition, which favours a deictic pronoun (*this* or *that* in English) or lexical DP.

Another expected result is that there is hardly any generic object use in either condition. Speakers simply do not use the generic object in referential contexts. This result supports the idea that the generic object is non-referential, and cannot take on referential properties.

3.6 NON-REFERENTIAL CONDITION

Within the non-referential condition, I divided the data by whether or not there was an adverbial or a prepositional phrase following the verb. I expected that where there was already some postverbal element, speakers would feel less inclined to insert a generic object.



The presence of a postverbal element in addition to the object seems to affect the use of the generic object. When there is some element following the verb, the use of the generic object appears to be optional, hovering around 50%. When there is no other postverbal element and the sentence would otherwise end with the verb, the use of the generic object rises dramatically to about 95%.

There are several possible explanations for this apparent interaction between postverbal elements and generic object use. A phonological or prosodic analysis might be that the verb is analyzed as a lexical compound that like most lexical items, prefers to be bisyllabic. This is supported by the observation that sentences rarely end on the verb. The generic object would then be inserted simply to lend phonological weight. A semantic analysis could be that the postverbal element contributes some semantic information that renders the generic object redundant. We will look at this possibility in a later section.

3.7 SEMANTIC CONTRIBUTION OF GENERIC OBJECT

Finally, I wanted to test Cheng & Sybesma's claim that the generic object does not contribute anything semantically, and is in fact semantically void. I asked participants to judge the acceptability of using verbs with generic objects in contexts where the contextual object was semantically incompatible with the generic object. Participants were asked to give yes/no answers to the following questions:

- (8) Is it acceptable to use the generic object 'car', as in 'drive-car' to describe someone who is driving a bus?

- (9) Is it acceptable to use the generic object ‘book’, as in ‘read-book’ to describe someone who is reading a newspaper?
- (10) Is it acceptable to use the generic object ‘book’, as in ‘read-book’ to describe someone who is reading something on the internet?
- (11) Is it possible to use the generic object ‘rice’, as in ‘eat-rice’ to describe someone who is eating spaghetti?

If Cheng & Sybesma’s analysis is correct, all four constructions should be acceptable, since they refer only to the action in general, and the generic objects themselves do not contribute semantically to the construction. The results are found in Table 6.

Table 6: % acceptance of use of generic object

Situation	Construction	% Acceptance
driving a bus	drive-car	42.86
reading a newspaper	read-book	6.67
reading on the internet	read-book	7.14
eating spaghetti	eat-rice	86.67

The data do not show any definitive acceptance of using a generic object in reference to an object that is semantically incompatible. This is not due to the referentiality of the object, because the construction with the generic object *book* can very well be used when referring to the action of reading an actual book. I take these results to suggest that the object carries some semantic information. It is this semantic information that disallows speakers from linking the generic object to a semantically incompatible contextual object.

4 DISCUSSION

4.1 SUMMARY OF OBJECT TYPES IN THE DATA

We can summarize the possible transitivity patterns in Chinese by first stating that in the contexts that we have reviewed thus far, we have seen not two ways of expressing an object in Chinese, but rather five different forms of the object, as listed in Table 7.

Table 7: Possible object forms in Chinese

Referentiality	referential			non-referential	
Object form	pro _i	pronoun	lexical DP	[_N Ø] _{<v>}	generic N

Despite the variability in the types of objects, the preference is for the referential null object in referential contexts and for the generic object in non-referential contexts. The use of the generic object is not quite as uniformly governed as previously thought. There seem to be factors other than referentiality that lead speakers to use or not use the generic object. For example, the presence of a postverbal element in addition to the object affects the rate of generic object use.

One property that is clearly characteristic of the generic object is its non-referentiality; the generic object cannot take on referential properties. A point for further study is the observation that the generic object seems to carry some semantic information.

Finally, it is interesting to note that in non-referential contexts, speakers can use a null object. The null object in Chinese was previously thought to be found only in referential contexts. This will be discussed in the following sections.

4.2 REVISED THEORETICAL QUESTIONS

I began this paper with two main goals in mind, namely to establish the possible object types in Chinese, and the distribution and use of the generic object in Chinese. I have observed five different object types, each being found in a particular syntactic and referential context. I have established that there is variability in the use of different object forms, especially of the overt generic object. The questions that remain concern the factors that may be behind the variation in generic object use.

Another question that arises from the results is why the generic object exists in Chinese if a non-referential reading can be achieved intransitively. Previous analyses of the Chinese null object have been based on its behaviour as a referential empty category. However, the new data show that there is another null object to contend with – one which is, in contrast, characterized by its non-referentiality. We can find both the overt generic object and the non-referential null object seemingly in the same context. However when we look more closely within the non-referential context, there are certain factors that may be influencing which object form is used by the speaker. For example, the presence of an additional postverbal element such as an adverbial or a prepositional phrase seems to favour the null object. There must be a way to reconcile this observation with an analysis of the generic object. One possible solution is introduced in the following section.

4.3 GENERIC OBJECT USE FOR LEXICAL DISAMBIGUATION

The verb on its own is semantically ambiguous, and is rarely found in isolation (normally being found within a discourse context, or being coupled with some postverbal element that removes ambiguity of its meaning). In the referential context, the meaning of the verb is usually apparent from context. In a non-referential reading, particularly one that lacks previous discourse context, the lack of a realized object may leave the verb semantically lacking. A generic object is inserted to complement or complete the meaning of the verb. An adverb or a preposition that may contribute clues as to the meaning of the verb may also fulfill this function, in which case the generic object becomes an optional add-on.

The generic object does not appear to be semantically void, as predicted by Cheng & Sybesma. While it cannot take on referential properties, it clearly has a semantic contribution, as speakers cannot use it when the discourse object is semantically incompatible. The generic object seems to complement the verb semantically. In brief, the verb is ambiguous unless it is found in the context of a conversation or a particular syntactic string. The generic object helps to clarify the meaning of the verb.

A construction of interest occurs when speakers want to describe a manner in which a person does a particular action, and wishes to include the generic object. This construction must consist of the verb-object compound, followed by the verb, then the particle DE, and finally the adverb, as in (12).

- (12) ta kai che kai de hen kuai
 he drive car drive DE very fast
 ‘he drives very fast’

It is almost as if the verb-object compound is merely a tag that labels the verb as having the particular meaning that the speaker wishes to convey.

To get a subjective idea of the degree of ambiguity a particular verb might carry, I searched the verb *kai*, restricted to the first tone, on an online dictionary, and found eighty-two different word constructions that contained *kai*, the full range of which gave a set of very diverse meanings. Only one of the eighty-two, *kai che*, was defined as ‘drive’. Clearly *kai* on its own may be ambiguous, or have multiple meanings. It is possible that in order to clarify which of the meanings is intended, the speaker tags on ‘drive-car’, as if to signify ‘the driving-car kind of drive’.

Such examples of adding elements to disambiguate otherwise semantically ambiguous contexts may be found in English. For example, the following exchange might be heard among English speakers.

- (13) A: Let’s go shopping tonight.
 B: I can’t. I’m broke.
 A: I don’t mean shopping-shopping. I mean grocery-shopping.

Repeating the verb or adding an object appears to disambiguate the lexical semantics of the verb, and clarifies the precise meaning. This construction suggests that it is often helpful to have some semantic complement to the verb. The Chinese generic object may act as this semantic complement.

When there is some other postverbal element that offers some sort of semantic information, such as an adverbial or prepositional phrase that may contribute semantic information about manner or direction, the generic object is no longer necessary, and it is entirely up to the speaker to decide whether or not to insert the generic object. Thus we see optionality in the data in this context. A more detailed study of different types of postverbal elements is necessary to clarify what type of semantic information each can contribute, and the relationship between this information and the verb and generic object.

The final issue I will consider is how the non-referential null object might be analyzed.

4.5 POSSIBLE ANALYSES OF THE NON-REFERENTIAL NULL OBJECT

The nature of the null object in non-referential contexts is not clear. There are four possible ways of analyzing it. The first is to propose that the null object is simply a phonetically null form of the overt generic object. Like the overt generic object, it has no referential properties, and cannot acquire referential properties from the context.

The second possibility is to say that the null object is the same empty category as the referential null object in Chinese, but when no referent can be found from the context, a pragmatic rule deletes the object’s referential properties. This is an interesting possibility because it resembles the mirror image of the situation in English, where a non-referential null bare noun may acquire referential properties from the pragmatic context.

The third possibility is to propose that the null object is a universal bare noun that carries a core semantic trait (eg. the property of being *edible* when appearing with the verb *eat*, or the property of being *readable* when appearing with the verb *read*) acquired from the verb that semantically selects it. Hale & Keyser (2002)’s analysis treats this construction in English, and includes examples such as the verb *dance*, whose generic bare noun carries the semantic feature <dance>.

A final possibility is that Xu's Free Empty Category (FEC) might be the only possible null object in Chinese. Depending on the context, the FEC can acquire the appropriate referential properties. In non-referential contexts, it is a general bare noun that obtains its semantics from the verb. In referential contexts, it acquires its referential properties from the context.

Further study may help establish the precise nature of the non-referential null object as well as its distribution, and any relation it may bear to the referential null object.

5 CONCLUSION

There are clearly factors other than referentiality that govern the use of the generic object in Chinese, which alternates in non-referential contexts with the non-referential null object. The solution may not be purely syntactic, as in Cheng & Sybesma (1998)'s analysis of the generic object as a mechanism for blocking *pro*, but rather may be found by examining a combination of phonological or prosodic, semantic, and pragmatic factors. More work needs to be done to elucidate the mechanisms behind the distribution of these two objects, relative to each other, as well as to the distribution of the referential null object.

A more detailed look at possible postverbal elements and their semantics may help to clarify the semantic contribution of the generic object. One possible direction to go in is to propose that the generic interpretation doesn't come from the generic object, but rather from the non-referential null generic noun. The overt generic bare noun is then only pronounced, when other factors such as lack of context conspire to make the lexical semantics of the verb ambiguous. The function of the generic object would then be to disambiguate the lexical semantics of the verb. A more detailed study would have to be done on the semantics of the postverbal elements, their relationship with the semantics of particular verbs, as well as the particular factors that cause the verbal construction to be semantically ambiguous (eg. tone sandhi, lack of inflectional morphology, etc.).

Eventually a definitive analysis of the generic object may help to complement that of the null object and lead to a comprehensive theory that can account for the distribution of different object forms in Chinese.

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