Chapter 9

Existential Sentences in Chinese and (In)definiteness  

C.-T. James Huang

This chapter addresses four questions: What do existential sentences look like in Chinese? What is the structure of such sentences? Under what conditions do they exhibit the definiteness effect, requiring an indefinite but disallowing a definite argument? How is this distribution of the definiteness effect to be explained? These questions are taken up in turn in the four major sections that follow.

9.1 Kinds of Existential Sentences

In Chinese all existential sentences may be considered to involve a string having the general form depicted in (1).

\[(1) \ldots (\text{NP}) \ldots \text{V} \ldots \text{NP} \ldots (\text{XP}) \ldots 1 2 3 4\]

Position 1 is the position of the subject, and position 3 that of the NP whose existence is being asserted. The phrase in position 4 is an expression of predication, generally a descriptive clause or phrase, semantically associated with the NP in position 3. Based on the different kinds of verbs involved, four kinds of existential sentences may be distinguished. These are (a) sentences with the existential verb *you* 'have', (b) those with a verb of appearance or disappearance, (c) those with a locative verb, and (d) those with a verb expressing the existence of an event or experience. Each type is illustrated in the paragraphs that follow.

You-sentences are the closest counterparts to *there be*-sentences in English.

Existential Sentences in Chinese and (In)definiteness

(2) You gui  

'have ghost

'There are ghosts (here)'

(3) You yige ren hen xihuan ni  

'have one man very like you

'There is a man who likes you very much'

(4) Zhuo-shang you yiben shu  

'table-top have one book

'On the table there is a book'

(5) Zhuo-shang you yiben shu hen youqu  

'table-top have one book very interesting

'On the table there is a book very interesting'

As these examples illustrate, both positions 1 and 4 are optional. Position 1, if filled, may be filled with a locative NP, as in (4) and (5), or it may be filled with an NP assuming the role of a possessor, as in (6).

(6) Wo you yiben shu hen youqu  

'I have one book very interesting

'I have a book (that is) very interesting'

The locative phrase need not always occupy the subject position. It may occur as a PP anywhere in the sentence.

(7) a. Zai zhezi (wo) you yiben shu  

'at here I have one book

'I have a book here' (or 'There is a book here')

b. Wo zai Taipei you yige pengyou hen youqu  

'I at Taipei have one friend very rich

'I have a very rich friend in Taipei'

c. You yiben shu hen youqu zai zhuo-shang  

'have one book very interesting at table-top

'There is a book very interesting on the table'

d. You yiben shu zai zhuo-shang hen youqu  

'have one book at table-top very interesting

'There is a book on the table very interesting'

Sentences of the second type involve verbs like *la* 'come', *fasheng* 'happen', and *diao* 'arrive', which have to do with 'coming into existence,' or verbs like *si* 'die', *pao* 'escape', and *qu* 'go', which have to do with 'going out of existence.'
Like the other two types of existential sentences illustrated in (2)–(10), a locative existential sentence may also optionally take a predication clause in position 4.

(13) Hebian gui-zhe liangge guniang zai xi yifu river-side kneel-Dur two lass at wash clothes 'By the river kneel two girls washing clothes'

(14) Qiang-shang gua-zhe yifu hua hen haokan wall-top hang-Dur one picture very pretty 'On the wall hangs a picture very pretty'

An important special feature of the third type of existential sentence is that the subject position must be filled with a lexical phrase. In each sentence of (11)–(14) this requirement is fulfilled with the locative phrase appearing in position 1 in the form of an NP without the preposition zai 'at'. If the initial position is not filled, the sentences are ill-formed.

(15) a. *Tang-zhe yige bingren zai chuang-shang lie-Dur one patient at-bedtop
   b. *Zhan-zhe liangge xiaohei zai shu-dixin stand-Dur two child at tree-bottom
   c. *Gua-zhe yiding maozi zai qiang-shang hang-Dur one hat at wall-top

Furthermore, if the locative phrase appears in initial position in the form of a PP, the sentences are also unacceptable.

(16) a. ?*Zai chuang-shang tang-zhe yige bingren at bed-top lie-Dur one patient
   b. ?*Zai shu-dixin zhan-zhe liangge xiaohei at tree-bottom stand-Dur two child
   c. ?*Zai qiang-shang gua-zhe yiding maozi at wall-top hang-Dur one hat

The unacceptability of (16a–c) shows that the locative phrase must not only occur in preverbal position but also occupy the subject position. This is because only subjects must be filled by NPs. Other preverbal positions, such as the position of a topic or of an adjunct, may be filled by PPs.
(17) Zai jiali wo xihuan gen dide wan
at home I like with brother play
‘At home, I like to play with my brother’

(18) Wo zai jiali changchang ma ta
I at home often scold he
‘I often scold him at home’

Note that under certain circumstances the following sentences may be
felt to be well formed, where the subject position is unfilled and the
verb is a transitive locative verb (with the suffix -le).

(19) a. e fang-le xuduo xingli zai fangjian-li
   put-Perf many luggage at room-inside
   ‘e put many pieces of luggage in the room’

   b. e zai fangjian-li fang-le xuduo xingli
   at room-inside put-Perf many luggage
   ‘e put many pieces of luggage in the room’

(20) a. e gua-le yiding maozi zai qiang-shang
   hang-Perf one hat at wall-top
   ‘e hung a hat on the wall’

   b. e zai qiang-shang gua-le yiding maozi
   at wall-top hang-Perf one hat
   ‘e hung a hat on the wall’

However, these sentences are well formed only if an understood agent
is implied. In this respect, they differ from sentences like those in
(11)–(12), where no agent is implied. In other words, in the context of
an existential sentence like any of those in (11)–(12), but not in the
context of the sentences in (19)–(20), the D-Structure subject position
is dehematized; that is, the verb does not assign it a thematic role as a
lexical property. Thus, in (19)–(20) the empty subject is a “small pro”
in the sense of Chomsky (1982a), analogous to the empty subject of a
null-subject language like Italian. In each of the ill-formed examples in
(15), however, the empty subject is an expletive. The correct generaliza-
tion is therefore that only the expletive subject position must be
filled with a lexical NP. Those with a D-Structure thematic subject are
not considered members of the third type of existential sentence.

The fourth type of existential sentence generally involves a verb with
the experiential suffix -guo, as in (21)–(22), or a verb with the perfec-
tive suffix -le, as in (23)–(24).

(21) Wo jiao-guo yige xuesheng hen congming
I teach-Exp one student very clever
‘I have the experience of teaching a student who is very clever’

(22) Wo ai-guo yige nuhai hen piaoqiang
I love-Exp one girl very pretty
‘I have the experience of falling in love with a girl who is very
pretty’

(23) Wo xuan-le yimen ke hen nandong
I elect-Perf one course very hard-to-understand
‘I took a course which was hard to understand’

(24) Ta song-le yiben shu gei wo hen youqu
he give-Perf one book to I very interesting
‘He gave a book to me that was very interesting’

This final class of sentences differs from the others in the following two
ways. First, position 1 is always occupied by a D-Structure subject
(agent in the examples given here), whereas verbs in the other types of
sentences are generally “unaccusative” in the sense of Perlmutter
(1978) (or “ergative” in the sense of Burzio (1981)), in that they do not
have a D-Structure subject—with the single exception of you ‘have’,
which may or may not have a D-Structure subject. Second, the verbs in
this last type (though not those in the other three types) belong to an
open class, in that any transitive verb, as long as it is suffixed with
experiential -guo or the perfective -le, may qualify as the verb of a
sentence of this type. On the other hand, sentences of this type are
similar to the other three types in two other ways. First, the verbs used
all have to do with “existence” of some sort. A verb with the experien-
tial suffix conveys the existence of an experience, and a verb in the
perfective denotes the existence of an event. (Recall that the English
perfective is have; also see (35).) Second, all four types of sentences
may optionally contain a clause of predication in position 4. The exa-
amples in (21)–(24) all contain such a clause of predication. The follow-
ing sentences show that the predication clause is optional.

(25) Wo jiao-guo yige xuesheng
I teach-Exp one student
‘I have the experience of teaching a student’
(26) Ta song-le yiben shu' gei wo
     he give-Perf one book to I
     'He gave a book to me'

If the verb is not suffixed with -guo or -le, then often no expression of
predication may appear.

(27) Ta meitian jiao yige xuesheng (　hen congrming)
     he every-day teach one student very clever
     'He teaches a student (very clever) every day'

These two points of similarity—existentiality of the verb and the poss-
able occurrence of XP—tie together our four types of sentences, to the
exclusion of other sentence types.

9.2 The Structure of Existential Sentences

We have seen that existential sentences in Chinese have the linear form
(NP) V NP (XP). Let us now consider the possible hierarchical struc-
ture of such sentences. The only thing that appears to be really worth
discussing is the structural relationship of XP and the NP in position 3:
Does the sequence NP – XP form a constituent? If so, what category is
that constituent? The other aspects of the structure of an existential
sentence appear to be relatively uncontroversial. For example, the NP
in position 1 is the subject under the immediate domination of S but not
VP. The sequence V – NP – (XP) is dominated by VP. That the XP,
when it appears, is under VP but not immediately under S is assumed in
all discussions of existential sentences in the literature that I am aware
of and is further confirmed by the fact that in Chinese a sentential ad-
jective can only appear preverbally. I will further assume, without any
comment, that the NP in position 3 is in object position in both
D-Structure and S-Structure, regardless of whether the sentences are,
in traditional terms, transitive or intransitive. That is, I assume that no
'subject-inversion' whatsoever is involved in any of the sentences
above. All intransitive existential verbs are unaccusative in the sense of
Perlmutter (1978), and they are assumed to select, as a lexical property,
only complements but no subjects. (A "pure intransitive" or "unergative" verb does not qualify as an existential verb since it does not sub-
ject-verifies for an object. *Ku le yin ren "There cried a man".)

Existential Sentences in Chinese and (In)definiteness

The question about the structural relationship of the object NP and
the XP has been a point of controversy in recent discussions of there
be-sentences in English. Three structures have been proposed for a
sentence like (28), indicated in (29).

(28) There was a pig roasted

(29) a. There was [NP a pig roasted]
     b. There was [XP a pig roasted]
     c. There was [NP a pig] [XP roasted]

According to both (29a) and (29b), the sequence NP – XP is a con-
stituent: in (29a) it is an NP (the "bare NP" analysis); and in (29b) it is a
"small clause" in the sense of Williams (1975) (the clausal analysis).
These two analyses differ with respect to whether NP or XP is the head
of the constituent [NP XP]. According to (29c), NP and XP do not form
a constituent but are both sisters of the verb (the "NP – XP" analysis).
The "bare NP" analysis is championed by Williams (1984) and Jenkins
(1975). The small clause analysis is proposed by Siuwell (1981) and
followed by many others (see, for instance, Safrir 1982, Reuland 1983).
The NP – XP analysis is assumed by Miltsark (1974), among others. Let
us consider these analyses with respect to existential sentences in
Chinese.

The bare NP analysis claims that [NP XP] is a structure of postnomi-
nal modification, the XP being a postnominal modifier of the preceding
NP. In English, nominal modifiers may often follow their heads.
Therefore, as Williams (1984) puts it, a possible argument for the bare
NP analysis is that it is not only possible to generate all there be NP XP
strings with the structure there be NP but also quite impossible to pre-
vent their generation in this manner. If we consider Chinese existential
sentences, however, a completely different conclusion can be reached.
This is because the internal structure of Chinese noun phrases is, as
well known, strictly head-final. Given this general rule, it would be
impossible, within the bare NP analysis, to generate any existential
sentence in which an XP appears in position 4. That is, within this anal-
ysis one must allow for an exception to the general word order rule.
The question then arises why a postnominal modifier may occur only in
the four kinds of constructions just illustrated, and only in position 4 of
such constructions. For example, if not in position 4, a nominal modi-
(30) a. Ta bei yige [hen keqi de] ren pian le
   he by one very polite Rel man cheat Perf
   'He was cheated by a very polite man'

b. *Ta bei yige ren [hen keqi] pian le
   he by one man very polite cheat Perf

(31) a. Wo ba liangge [hen congming de] ren pian le
   I ba two very clever Rel man cheat Perf
   'I cheated two very clever men'

b. *Wo ba liangge ren [hen congming] pian le
   I ba two man very clever cheat Perf

This restriction on the distribution of the XP poses an important problem for the bare NP analysis, since there appears to be no general reason why the position of a given constituent should make a difference with respect to the relative order of its head and modifier. No similar problem arises, of course, within the NP – XP or the clausal analysis. According to these analyses, the NP – XP sequence is either a non-constituent or a clause, but not an NP. (30b) and (31b) are therefore ill formed because such a sequence occurs in a position that must be filled by one and only one NP constituent (as the object of a preposition) but not by a nonconstituent or a clause, a requirement that is fulfilled in the case of (30a) and (31a), respectively. But the NP – XP sequence is not blocked from occupying positions 3 and 4 within a sentence, since the XP may be considered to fill either the position of a verb phrase complement or that of a small clause subcategorized by the higher verb.

Another way in which both the NP – XP analysis and the clausal analysis fare better than the bare NP analysis concerns the semantic difference between a prenominal and a postnominal XP that can be observed in (32) and (33).

(32) a. There is a flying plane

b. There is a plane flying

(33) a. Zhuan-shang you yiben hen youqi de shu
   table-top have one very interesting Rel book
   'On the table there is a very interesting book'

b. Zhuan-shang you yiben shu hen youqi
   table-top have one book very interesting
   'On the table there is a book very interesting'

The phrases flying and hen youqi 'very interesting' each have a restrictive function when they appear prenominally, so that what is being asserted is specifically the existence of a flying plane (and not just a plane) in the case of (32a) and that of an interesting book (and not just a book) in the case of (33a). When they appear in position 4, however, the XPs have a descriptive but not a restrictive function. (32b) asserts merely the existence of a plane and goes on to give a description of the existing plane. Likewise, in (33b) the AP 'very interesting' is a continuative description of the existing book. In other words, a postnominal XP makes a comment about the preceding NP. If such an XP is to be represented as a postnominal modifier in accordance with the bare NP analysis, then it must be represented as a nonrestricive modifier. However, this raises two problems. First, in English such XPs do not have the comma intonation characteristic of nonrestrictives. Second, in Chinese it is not clear why postnominal modifiers are possible only with nonrestrictives.4 Within the NP – XP or the clausal analysis, these problems do not arise. According to these analyses, the XP is treated as a predicate. The relation that it has with the preceding NP is therefore that between subject and predicate, or between topic and comment.5 And this is the correct interpretation of the XP.

Incidentally, the semantic difference between the (a)-examples and the (b)-examples of (32) and (33) is similar to that between (34a) and (34b).

(34) a. He ate the raw meat

b. He ate the meat raw

Williams himself (1984:136) assumes that (34b), unlike (34a), has an NP – XP structure, thus accounting for the fact that raw is a modifier in (34a) but a predicate in (34b). But if the NP – XP sequence in an existential sentence is analyzed as a bare NP, then it is not clear how a similar distinction can be made.

In short, I have argued against the bare NP analysis on two grounds. First, the internal structure of NP in Chinese is strictly head-final. Second, whereas an NP with a prenominal modifier clearly has a structure of modification, an NP – XP sequence has a structure of predication.

As for the choice between the clausal analysis and the NP – XP analysis, it seems to me that both structures may be involved in the existential sentences discussed here. On the one hand, the clausal analysis appears to be plausible for the sentences belonging to the second, third, and fourth types. This is because, first, verbs like 'teach',
‘sit’ and ‘die’ in general subcategorize for an NP, but not for a clause, as their (D-Structure) object, and this makes them very different from verbs like ‘consider’, which take only clausal objects. Second, a clausal analysis of the NP—XP sequence would treat the XP as the head of the sequence. But, as we have seen, XP is optional. Within the NP—XP analysis, the optionality can be easily accounted for by the parenthesis notation in the subcategorization frame of each of these verbs. Within the clausal analysis, however, it would be necessary to set up two separate subcategorization frames for each of these verbs.

On the other hand, there appears to be some reason for postulating the clausal analysis as a possible structure for the you-sentences. More specifically, suppose that you ‘have’ is an Aux, and that the rule expanding S is S → NP Aux XP, as proposed by Williams (1984); that is, Aux may subcategorize for any category. Then the NP—XP sequence in a you-sentence is forced to be a clause, given that Aux can only be followed by one XP. (The bare NP analysis is excluded by our earlier considerations.)

There is some evidence for analyzing you as an auxiliary. For one thing, it is well known (since Wang 1965) that you alternates with -le in marking the perfective aspect (an instance of Aux).

(35) a. Wo pian-le Zhangsan
    I cheat-Asp Zhangsan
    ‘I have cheated Zhangsan’

b. Wo mei you pian Zhangsan
    I not have cheat Zhangsan
    ‘I have not cheated Zhangsan’

As suggested originally by Wang, this shows that the suffix -le is a supple- tentive allomorph of the Aux you that has undergone Affix Hopping. Given that you may be an Aux, it is plausible at least, though not necessary, to postulate that it is an Aux in existential sentences. The necessary assumption is that you as an Aux subcategorizes for both VP and clause, a possibility that is allowed by the rule S → NP Aux XP. It is even possible to assume that you subcategorizes for all categories (like be in English, following Williams). We have already seen that it can be followed by VP and NP.6 For some speakers, it can also be followed by PP and AP.

 Existential Sentences in Chinese and (In)definiteness

(36) a. Ta mei you hen pinliang
    she not have very pretty
    ‘She is not very pretty’

b. Zhangsan you mei you zai nali?
    Zhangsan have not have at there
    ‘Is Zhangsan over there?’

In the related language Amoy there is even clearer evidence that ‘have’ subcategorizes for XP.

(37) Gua wu ki-gue a
    I have go-Exp Part
    ‘I have been there’

(38) Li wu gui-e pingyiup?
    you have how-many friend
    ‘How many friends do you have?’

(39) I wu sui bo?
    she have pretty not-have
    ‘Is she pretty or not?’

(40) I wu di chu bo?
    he have at home not-have
    ‘Is he at home or not?’

Given that you may subcategorize for NP, VP, AP, and PP, it is only natural to assume that it may also subcategorize for a clause, another instance of XP.7

Summarizing, I have argued that the NP—XP sequence is best analyzed, not as a structure of modification in accordance with the bare NP theory, but as a structure of predication in accordance with the NP—XP or the clausal theory. Furthermore, although the NP—XP theory appears to be more reasonable for sentences of the second, third, and fourth types, with you-sentences the clausal analysis appears to be plausible as well, though more evidence is needed to determine whether it is indeed the only correct analysis.

9.3 Distribution of the Definiteness Effect

It is well known that some existential sentences in Chinese, as in every other language, exhibit what Safir (1982) calls definiteness effects
(DEs), manifestations of the requirement that the NP in position 3 must be "indefinite."

(41) a. You yiben shu zai zhuo-shang
    have one book at table-top
    'There is a book on the table'

    b. *You neiben shu zai zhuo-shang
    have that book at table-top
    'There is that book on the table'

A proper semantic characterization of the definite versus indefinite distinction is beyond the scope of this chapter (see Milsark 1974, 1977; Barwise and Cooper 1981; Reuland 1983; and other chapters in this volume, especially chapter 12 by Keenan). For present purposes it suffices to say that "definites" include proper names, pronouns, NPs with a definite article or a demonstrative, bare NPs interpreted as generic or definite, universally quantified NPs, and NPs with quantifiers like 'most'. "Indefinites," on the other hand, include NPs with existential quantifiers and bare NPs interpreted as nongenerics.

The sentences in (41) already show that an NP with a definite determiner is disallowed in you-sentences. The following sentence shows that the same restriction applies to proper names, pronouns, universals, and 'most-NPs'.

(42) *You Lisi/tai/meige ren/daduoshu-de ren zai wuzi-li
    have Lisi/he/every man/most man at room-in
    'There is arc Lisi/him/everybody/most people in the room'

In the context of a nonexistentential sentence, or in a position other than position 3 of an existential sentence, a bare NP may be interpreted as generic or definite (and sometimes as nongeneric).

(43) Wo xihuan shu
    I like book
    'I like books'

(44) Wo mai-le shu le
    I buy-Perf book Prt
    a. 'I bought a book(some) books'
    b. 'I bought the book(s)'

(45) Ren si-le
    man sit-Perf

Existential Sentences in Chinese and (In)definiteness

However, in position 3 of a you-sentence a bare NP has only the nongeneric, nondefinite interpretation.

(46) You ren lai-le
    have man come-Perf
    'Someone came'

Moreover, in Chinese a possessive NP may be definite or indefinite in the context of (47) but only indefinite in (48).8

(47) Ta da-le wo-de pengyou
    he hit-Perf my friend
    'He hit (one/some of) my friends'

(48) You wo-de pengyou zai wuzi-li
    have my friend at room-in
    'There is/are a/some friend(s) of mine in the room'

Although these kinds of you-sentences exhibit a clear DE, it has also been a commonplace observation that not all existential sentences exhibit the same effects. The lack of a DE is observed not only in "list" contexts like (49) but also in other contexts such as (50) and (51).

(49) Who do we have here?
    Well, there are the two students of yours, you, and me.

(50) Chuang-shang tang-zhe Zhangsan
    bed-top lie-Dur Zhangsan
    'In the bed lies Zhangsan'

(51) Tai-shang zuo-zhe zhuxi-tuan
    platform-top sit-Dur presidium
    'On the platform sits the presidium'

As far as I know, there has been no clear description of where the DE occurs in Chinese existential sentences. In this section I attempt a systematic statement of its distribution.

There is a clear difference with respect to the distribution of the DE depending on whether or not a given existential sentence contains an expression of predication in position 4.9 First of all, consider sentences in which the predication does not occur.

The DE is most often observed within a you-sentence. However, there is an asymmetry between you-sentences in which the subject position is lexically occupied and those in which it is not. In particular, in
the examples in (52) and (53) the object of you can be definite or indefinite.

(52) a. Ni you-mei-you yiben shu zai zheli? you have-not-have one book at here 'Do you have a book here?'
b. Ni you-mei-you zheben shu zai zheli? you have-not-have this book at here 'Do you have (a copy of) this book here?'

(53) a. Zheli you-mei-you yiben shu? here have-not-have one book 'Is there a book here?'
b. Zheli you-mei-you zheben shu? here have-not-have this book 'Is there (a copy of) this book here?'

In (52) position 1 is occupied by a D-Structure subject that has the thematic role of a possessor. In (53) the same position is occupied by a locative NP. Since no possessor is implied in (53), we may assume that the sentence does not have a D-Structure subject; that is, the subject position is an expletive position before the locative moves into it. The well-formedness of both (52) and (53) shows that, as long as the surface subject is filled with an NP, no DE obtains in a you-sentence.

Now, consider a you-sentence in which the subject position is not lexically occupied.

(54) a. You-mei-you yiben shu zai zheli? have-not-have one book at here 'Is there a book here?'
b. *You-mei-you zheben shu zai zheli? have-not-have this book at here 'Is there this book here?'

(54b) may be considered acceptable only in a context where an understood possessor is implied (that is, only when the empty subject is not an expletive but a pro with an independent thematic role—see (19)–(20)). In other words, (54) contrasts with (53), where no possessor is

Existential Sentences in Chinese and (Un)Definiteness

Notice that although in some sentences (such as those in (52) and (53)) a definite NP may follow you, such an NP is only syntactically definite but not semantically so. Thus, a sentence like 'Do you have this book here?' does not ask the contradictory question whether you have the copy of the book I am holding in my hand. Rather, it asks whether you have another copy of the book. The relevant point being made here is that, although a you-sentence with a lexical subject allows an object that is syntactically definite but semantically indefinite, a you-sentence with an unoccupied nonthematic subject position cannot.

Turning now to sentences with an appearance or disappearance verb, we find that the DE obtains in the following examples.

(55) Lai-le liangge ren*/Lisa*ta/neige ren*/meige ren le come-Perf two man/Lisa/he/that man/every man Prt Lit. 'Came two men/*Lisa/*him/*that man/*everybody'

(56) Si-le liangge ren*/Lisa*ta/neige ren*/meige ren le die-Perf two man/Lisa/he/that man/every man Prt Lit. 'Died two men/*Lisa/*him/*that man/*everybody'

In each case a definite D-Structure object must be NP-Moved to the subject position.

(57) Lisa/neige ren/meige ren lai-/*si-le Lisi/he/that man/every man come-/*die-Perf 'Lisa/he/the man/everybody came/died'

Even if the surface subject position is filled, the DE still obtains; this is one way the (dis)appearance sentences differ from you-sentences.

(58) Zheli si-le yige ren*/ta/neige ren*/meige ren le here die-Perf one man/*he/that man/every man Prt

Another different property of (dis)appearance sentences is that the DE obtains only if the existential verb is in the main clause, as in (58), or in an assertive clause, as in (59).

(59) Lisi shuo (zheli) si-le yige ren*/ta/neige ren Lisi say here die-Perf one man/*he/that man *Lisi said that (here) died a man/*he/*the man

If the existential verb is embedded in a nonassertive clause, such as an
(60) Sui-ran lai-le Lisi/neige ren, keshi... 
  though come-Perf Lisi/that man but
  'Although Lisi/the man came, but...'

(61) Ruguo fasheng zhejian shiqing, jiu... 
  if happen this matter then
  'If this thing happens, then...'

(62) Zicong zou-le Zhangsan yihou, jiu... 
  since go-Perf Zhangsan after then
  'Ever since Zhangsan left,...'

As for existential sentences of the third type, they exhibit no DE at all. This is true regardless of whether a given locational verb is in the main clause or an adjunct clause.

(63) a. Shu-dixia zuo-zhe yige ren/Zhangsan/neige xiaohai 
    tree-bottom sit-Dur one man/Zhangsan/that child
    'Under the tree sits a man/Zhangsan/the child'

b. Zhuo-shang fang-le yiben/neibei ni yao de shu 
    table-top put-Perf one/that you want Rel book
    'On the table is put a/the book that you want'

c. Qiang-shang qua-zhe rili 
    wall-top hang-Dur calendar
    'On the wall hangs a/the calendar'

(64) a. Sui-ran wuzi-li zhu-zhe zhege jiahuo,... 
    though room-in live-Dur this fellow
    'Although in the room lives this fellow,...'

b. Yinwei limian tang-zhe neixie ningren,... 
    because inside lie-Dur those patient
    'Because inside (the room) lie those patients,...'

Finally, with sentences of the fourth type, the DE also does not obtain.

(65) a. Wo jiao-guo yige xuesheng/tu/Lisi/neige ren 
    I teach-Exp one student/he/Lisi/that man
    'I have taught a student/him/Lisi/the man before'

b. Wo mai-le liangben/zheben/neibei shu 
    I buy-Perf two/this/that book
    'I bought two/this/that book(s)'

(66) a. Sui-ran wo jiao-guo yige/neige xuesheng,... 
    though I teach-Exp one/that student
    'Although I have taught a/the student before,...'

b. Zicong wo kan-le liangben/zheben shu yihou,... 
    since I read-Perf two/this book after
    'Ever since I read two/this book(s),...'

We have seen the distribution of the DE in sentences that do not contain a predication phrase in position 4. Let us now consider what happens when they do contain such a phrase. Quite unlike the previous cases, no definite NP may appear in any such sentence.

(67) You yige/neige ren hen youqian 
    have one/that man very rich
    'There is a/the man very rich'

(68) Lai-le yige ren/*ta/neige ren hen yonggan 
    come-Perf one man/he/that man very brave
    'There came a man/*he/the man very brave'

(69) Di-shang zuo-zhe yige/neige ren hen congming.16 
    floor-top sit-Dur one/that man very clever
    'On the floor sat a/the man very clever'

(70) Wo ai-guo yige nuhai/*Mal/"neige nuhai hen piaoliang 
    I love-Exp one girl/Mary/"that girl very pretty
    'I have been in love with a girl/*Mary/"that girl very pretty'

This restriction obtains without exception, regardless of whether or not the subject is lexically filled, and whether the verb is in the main clause or in an adjunct clause. Compare (71) with (52)–(53), (72) with (60)–(62), (73) with (64), and (74) with (66).

(71) Wo you yiben/*zheben shu hen youqu 
    I have one/this book very interesting
    'I have a/the book which is very interesting'

(72) Fasheng-le yijian/*neijian shiqing hen kep a yihou,... 
    happen-Perf one/that matter very terrible after
    'After there happened a/the thing which is terrible,...'

(73) Sui-ran zheli zhu-zhe yige/neige ren hen xiong,... 
    though here live-Dur one/that man very fierce
    'Although here lives a/the man who is very fierce,...'
(74) Yinwei ni jiao-guo yixie/neixie xuesheng hen
   because you teach-Exp some/those student very
   clever
   'Because you have taught some/those students who were very
clever, . . .'

Summarizing, the distribution of the DE in Chinese existential sentences is as follows. When a predication phrase occurs in position 4, the DE obtains without exception. In the absence of the predication the DE is observed with you-sentences when an expletive subject is empty and with (dis)appearance verbs when they appear in the main clause or in an assertive clause, but not with locative existential sentences or sentences of experiential existence, with you-sentences whose subject position is filled, or with (dis)appearance clauses in nonassertive contexts.

9.4 On Deriving Definiteness Effects

Now that we have seen the distribution of the DE in existential sentences in Chinese, the next questions to be addressed are why such sentences may exhibit the DE, and why the distribution of the DE is precisely as it is.

There have been a number of approaches to the theory of the DE. These are either syntactic, semantic, or pragmatic in nature—following the typology used by Saito in chapter 4—or a combination thereof. A syntactic, and by now well-known, account is that of Safr (1982; see also chapter 4) and Reuland (1983). According to this account, the presence of the DE is closely tied to the fact that most existential sentences involve verbs that do not select D-Structure subjects. The essence of this theory is based on the generalization in (75).

(75) The DE is found in unbalanced \( \theta \)-chains.

A \( \theta \)-chain, as defined in Chomsky (1981), is a \( c \)-command chain \((X,Y)\), \( X \) \( c \)-commanding \( Y \), where \( X \) is a nonthematic position and \( Y \) is a thematic position. Typical examples of \( \theta \)-chains are those established when an argument is moved. A normal chain established in this way has the form \((NP,EC)\), where NP is a lexical phrase and EC is an empty category. An unbalanced chain, on the other hand, is one of the form \((EC,NP)\). In each of the sentences (76) and (77) there is an unbalanced

Existential Sentences in Chinese and (Indefiniteness

chain if we assume that the NP in position 3 is coindexed with the subject position.

(76) E\( \_\_ \)you yiben shu \( \_\_ \) zai zheli
   have one book at here
   'There is a book here'

(77) E\( \_\_ \)fusheng-le \( \_\_ \) yijian shiqing h\( \_\_\) kep\( \_\_\) \( \_\_ \)
   happen-Perf one matter very terrible
   'There happened something terrible'

Since in an unbalanced chain the lexical NP is A-bound, if nothing else is said such a chain would be excluded by Principle C of the binding theory, which requires all R-expressions to be A-free. Safr's theory then postulates that indefinite NPs, but not definites, are exempt from Principle C—on the ground that indefinites are less referential than definites (the "Indefinite NP Property" proposed in Safr 1982: 237) or that they are predicates in some sense in existential sentences (the "Predicate Principle" proposed by Safr in chapter 4). The result is, then, that when an unbalanced chain must be formed (for whatever reason), a sentence is well formed just in case the chain can escape Principle C. And this is the DE.

This approach appears to be quite plausible in view of some of the facts we have seen in Chinese. For one thing, we saw that, in the absence of a predication clause in position 4, the DE obtains only in existential sentences of the first two types but not in those of the third and fourth types. Consider sentences of the fourth type, in which the verb has a thematic subject. Obviously, in such sentences there can be no unbalanced chain connecting the subject with the NP in position 3—in fact, they cannot form a \( \theta \)-chain at all, or the \( \theta \)-Criterion would be violated. The absence of an unbalanced chain thus correctly predicts that no DE obtains in such sentences. The same applies to sentences of the third type. As noted earlier, an important property of locative existential sentences is that the subject position must be filled with a locative NP. The locative phrase cannot occur as a PP either postverbally or preverbally. It is not clear what forces the subject position to be filled, but it is clear that no unbalanced chain is present in such sentences, and again there is no DE. On the other hand, sentences of the first two types are clearly those in which an unbalanced chain may be formed, because the verbs do not select a D-Structure subject—except for you, which may or may not have a D-Structure subject—
and because their expletive subjects need not always be lexically filled. The fact that the first two types of sentences differ from the last two types thus comes as no surprise.

Another piece of support for the syntactic approach comes from the distribution of the DE in you-sentences. We have seen that a you-sentence exhibits the DE just in case an expletive subject position is left lexically unoccupied (see the discussion centering around (52)-(54)). If an expletive subject position is filled with a locative phrase, or if the subject of a you-sentence is not expletive (either filled with a lexical possessor NP or a pro), then the DE does not obtain. Obviously, in these cases no unbalanced chain can be involved, and the lack of the DE is correctly predicted. In the case of an unfilled expletive subject position it is plausible to assume that it always entails the existence of an unbalanced chain. The obligatory existence of such a chain may be forced by Case inheritance, as suggested by Safrir (1982), or by a principle that requires an expletive subject to be coindexed with something in VP at LF, as suggested by Reuland (1983). In either case the existence of the DE is predicted. This syntactic explanation is particularly appealing, especially in view of the fact that what is prohibited in the DE context is not just an NP that is semantically interpreted as definite but one that cannot have a definite syntactic form. A semantic explanation would not be sufficient to make the necessary distinction.

We thus see that Safrir’s and Reuland’s account receives some support from certain existential sentences in Chinese. It does not appear to be capable of deriving the full range of DE facts that we have observed, however. First, we have seen that within a (dis)appearance sentence the DE may obtain regardless of whether the subject position is occupied by a locative or temporal NP (see (55)-(59)). In the absence of an unbalanced chain in such sentences as (58), Safrir’s and Reuland’s theory is too weak to account for the presence of the DE. Second, given that the DE disappears when a (dis)appearance sentence is embedded within an adverbial adjunct (see (60)-(62)), this theory also appears to be too strong in predicting a DE that actually does not occur even when the subject is unfilled. There appears to be no general reason why the difference between main and adverbial clauses should make a difference with respect to the presence of an unbalanced chain. Third, whenever a predication clause is present in position 4, the DE obtains in all sentences without exception, regardless of whether the subject is thematic or expletive, filled or empty, and therefore regard-

Existential Sentences in Chinese and (Indefiniteness) 247

less of whether there is an unbalanced chain (see (67)-(74)). This last case suggests that, in addition to “Safrir’s generalization” (75), the generalization in (78) is operative.

(78) The DE is found in existential sentences with a clause of predication.

The three facts just mentioned apparently cannot be derived from Safrir’s and Reuland’s theory. It seems, however, that they may be partially derived from a theory that is less syntactic in nature. Consider first the distribution of the DE when no predication is present. It seems that the four kinds of sentences differ with respect to the degree of existentiality inherent in the verbs involved. In particular, you appears to be purely existential in meaning. A (dis)appearance verb conveys existence primarily but also something else. A locative verb appears to convey primarily the location of a given object, though also its existence. Similarly, an experiential or perfective verb denotes primarily an action, and only secondarily the existence of an experience or event. More specifically, you is completely existential, a (dis)appearance verb is highly existential since the verb stem itself expresses existence, and a locative, experiential, or perfective verb is less so since the existentiality is associated only with its suffix.

If this is correct, then it makes sense to assume that whereas the DE obtains with you in most cases, it obtains with (dis)appearance verbs only when they appear in positions where an assertion of existence can be most easily made—that is, when the relevant NP is in focus, as in main or assertive clauses. The DE does not obtain with locative, experiential, or perfective verbs since the existence component of the verb, being within a suffix, is too weak to make the verb sufficiently existential. The DE is found, then, only when a given sentence is “highly existential”—presumably because a definite NP is highly inappropriate with the semantics of existence. In the words of Barwise and Cooper (1981:183), a “strong” determiner will result in either tautology or contradiction.

A plausible account of the asymmetry between you-sentences and (dis)appearance sentences thus appears to be one that is lexical-semantic in nature—one that appeals to the semantic difference between you and other verb types. If correct, however, this account would undermine the syntactic account regarding the absence of the DE in locative, experiential, and perfective sentences (where the subject is either filled or thematic), though the contrast between certain
Now consider generalization (78), when a predication clause does occur. (78) apparently has no similar explanation within the lexical-semantic approach, given that the DE obtains uniformly with verbs of all four types, in the presence of a predication. In fact, the possible occurrence of a predication probably has nothing to do with the inherent features of a verb. Although I have indicated that XP occurs most typically with an existential verb or one that contains some feature of existentiality (as in an experiental or perfective sentence), it is also possible to find sentencs like (79)--(80), in which the verb appears to have nothing to do with existence.

(79) Wo hén xiang xuán yīmen ke tamen shuo hén youqu
I very hope elect one course they say very interesting
'I very much hope to elect a course, which they say is very interesting''

(80) Wo zheng zài kàn yīben shū hén youyì
I right now reading a book very interesting
'I am right now reading a book which is very interesting''

Furthermore, there is in fact a condition more strict than the DE on sentences with a predication clause. In addition to being indefinite, the NP in position 3 must contain a numeral quantifier (as in (79)--(80) and other previous examples) but cannot be a bare NP. Compare (81) and (82).

(81) a. Wo rénshī yī'ge nü'ér hén piāoliáng
I know one woman very pretty
'I know a woman who is very pretty''

b. *Wo rénshī nü'ér hén piāoliáng
I know woman very pretty

(82) a. Wo jiāo-guò yī'ge xuèshēng hén cóngmíng
I teach one student very clever
'I have taught a student who is very clever''

b. *Wo jiāo-guò xuèshēng hén cóngmíng
I teach student very clever

The (b)-sentences are ill-formed even if the object NP is interpreted as an indefinite nongeneric on a par with a bare plural in English. Clearly,

this is not an instance of the DE, and it is not observed with sentences that exhibit a DE but contain no predication clause.

(83) a. Si-le yī'ge rén le
die-Asp one man Asp
'A man died'

b. Si-le rén le
die-Asp man Asp
'Someone/People died'

What (80) and (81) show is that they require the NP in position 3 to be referential. Together with the DE, this means that the NP must be specific, that is, referentially indefinite. The generalization is that these sentences exhibit a "specificity effect" (and not just a DE).

(84) In sentences with a predication clause in position 4 the NP in position 3 must be specific.

There is further evidence that this generalization is correct. It is well known that in Chinese a numerically quantified NP is generally specific. Thus, such an NP does not occur naturally in the scope of negation.

(85) *Wo méiyòu kanjiàn yī'ge rén
I not see one man
'I did not see a certain man''

Furthermore, a sentence with a clause of predication cannot occur as a question.

(86) *Ni shènme shíhou jiāo-guò yī'ge rén hén cóngmíng?
you what time teach one man very clever
"When did you teach a certain man who is very clever?"

(87) *Shéi rénshī yī'ge nü'ér hén piāoliáng?
who know one woman very pretty
"Who knows a certain woman who is very pretty?"

Questions like (86)--(87) are as odd as their English translations. Given the generalization (84), the object NP in each of (86)--(87) is necessarily specific—that is, an NP whose reference is known to the speaker but assumed by the speaker to be unknown to the addressee. The oddness of these questions thus follows—for the simple reason that the interrogator is not being cooperative in the sense of Grice (1975).
What, then, might be the explanation for generalization (8.4)? Notice that the syntactic account proposed by Safir and Reutland is not intended to deal with “specificity effects,” and one need not regard (8.4) as a problem for their theory. However, it is possible to factor (8.4) into two parts: an indefiniteness requirement (the DE) and a referentiality requirement. In this case it is reasonable to hope to derive the indefiniteness requirement from whatever principle it is that derives the DE in general terms. It is unclear, however, how either the syntactic account described here or any account based on lexical semantics can provide an adequate explanation for both parts of (8.4). A functional-pragmatic account may be plausible in this case. Intuitively, the predication clause seems to exist solely for the purpose of elaborating on some NP being introduced into the discourse. Such an NP is necessarily indefinite (see Heim 1982). Furthermore, such an NP must be referential, inasmuch as the predication clause is a continuative description. (As in the case of a nonrestrictive relative clause, it is impossible to provide a continuative description of something that is entirely nonreferential.) Since the NP cannot be definite or nonreferential, it can only be specific. This intuitive remark, however, cannot stand as a real explanation for the “specificity effect.” Unfortunately, I am not able to formulate in precise terms a better theory of definiteness and specificity effects, and I must leave the problems observed for future studies.

9.5 Conclusion

In this chapter I have provided a description of some general properties of existential sentences in Chinese and discussed, in a rather preliminary fashion, how some of these properties may be derived in a proper theory of grammar. I have argued that existential sentences cannot be properly analyzed along the lines of the bare NP theory, and I have suggested that most of them may be best analyzed along the lines of the NP – XP theory, though the clausal analysis may also be quite plausible for some of them. Regarding the distribution of the DE, I have shown that although some facts appear to support a syntactic account of the DE, others appear to resist such an account and favor instead an argument that is either lexical-semantic or functional-pragmatic in nature. This discussion is inconclusive regarding which account might provide the right solution to the problem of explaining the DE. I hope to have at least given a fair survey of the problems involved that any adequate theory of the DE must be prepared to deal with.

Existential Sentences in Chinese and (Un)definiteness

Notes

For helpful discussions on the issues addressed here I am grateful to Yun-Hua Huang, Kuang Mei, Jeffrey Tung, Shou-Shin Teng, Peter and Gaby Cole, the participants of the Fifth Groningen Round Table, and particularly Eric Reutland. Citation of the papers presented at the Round Table is based on the oral presentation or material circulated at or before the meeting.

1. The string zhou-shang ‘table-top’ in (4)–(5) is a “postposition” in Chinese (see Heim 1982). Furthermore, such an NP must be referential, inasmuch as the predication clause is a continuative description. (As in the case of a nonrestrictive relative clause, it is impossible to provide a continuative description of something that is entirely nonreferential.) Since the NP cannot be definite or nonreferential, it can only be specific. This intuitive remark, however, cannot stand as a real explanation for the “specificity effect.” Unfortunately, I am not able to formulate in precise terms a better theory of definiteness and specificity effects, and I must leave the problems observed for future studies.

Notes

For helpful discussions on the issues addressed here I am grateful to Yun-Hua Huang, Kuang Mei, Jeffrey Tung, Shou-Shin Teng, Peter and Gaby Cole, the participants of the Fifth Groningen Round Table, and particularly Eric Reutland. Citation of the papers presented at the Round Table is based on the oral presentation or material circulated at or before the meeting.

1. The string zhou-shang ‘table-top’ in (4)–(5) is a “postposition” in Chinese (see Heim 1982). Furthermore, such an NP must be referential, inasmuch as the predication clause is a continuative description. (As in the case of a nonrestrictive relative clause, it is impossible to provide a continuative description of something that is entirely nonreferential.) Since the NP cannot be definite or nonreferential, it can only be specific. This intuitive remark, however, cannot stand as a real explanation for the “specificity effect.” Unfortunately, I am not able to formulate in precise terms a better theory of definiteness and specificity effects, and I must leave the problems observed for future studies.

2. The first three types of existential sentences have been fairly well known among Chinese grammarians. For more detailed descriptions, see Pan 1963, Teng 1977, Mei 1972, Huang 1967 [1983], and Wang 1981. I and Thompson (1981) consider the fourth type of sentence a noun in the sentence, all of which they call “presentative sentences.”

3. Sentences like the following are well formed, where the bracketed clause contains the relative clause marker de.

(i) Ta bei yige ren [hen youquian de] pian-le
   he by one man very rich Rel cheat-Asp
   'He was cheated by a man, one who was very rich'

(ii) Ta kanjian-le neige xuesheng [dai yangjing de]
    he see-Asp that student wear glasses Rel
    'He saw the student, the one who had glasses on'

These bracketed clauses differ from the expressions of predication given in (30)–(31) in that each contains a relative clause marker and is obviously a relative clause modifier. Such a clause can occur with an NP in any NP position, unlike the predication clause discussed in the text. Although these clauses may occur as postnominal modifiers, they do not constitute real evidence for postnominal modification, since they can be readily analyzed as prenominal modifiers of an appositive NP with an empty head following de (as in the case of a normal free relative).

4. Shou-Shin Teng (personal communication) has suggested that the grammaticality of sentences like (i) provides a further argument against the bare NP analysis.

(i) Wo you yige pengyou ta hen congming
   I have one friend he very clever
   'I have a friend who is very clever'
It is well known that, in Chinese, relativization of a subject must use the gap strategy but not the resumptive pronoun strategy. If, according to the bare NP analysis, the descriptive clause tu hen congming 'he is very clever' were analyzed as a postnominal relative clause, then tu would be a resumptive pronoun, a situation that is otherwise impossible in normal cases of relativization.

5. Structures of predication are not limited to those in which the predicate literally forms a constituent with the NP that it predicates on. For example, Chomsky (1980a) assumes that a purposive clause is a predication on a main clause NP though the two do not form a constituent. In other words, both the clausal analysis and the NP – XP analysis are consistent with the view that the NP – XP sequence involves a structure of predication.

6. In case you have is followed by NP alone, it may also be the main verb; indeed, it must be if it is itself suffixed with the perfective -de, as in tu you-te hai 'she have-perf child' (that is, 'she is pregnant').

7. Williams (1984) argues that his bare NP theory (but not the NP – XP theory) is the only possible one by the independently motivated assumption that he is an Aux and that it subcategorizes for a single XP. But the bare NP theory cannot be argued for in this way, since in a sentence like there arrived a man sick, arrived is apparently not an Aux, though apparently Williams will also assume that a man sick is an NP.

8. The Chinese counterpart of both my books and books of mine is wo de shu, the same form as my book. Whereas my books is definite and books of mine indefinite in English (given that are 'my bookbooksbooks of mine on the table'), wo de shu can be either definite or indefinite; hence the well formedness of (48). This difference between English and Chinese possessives may involve a difference in what Gill calls the 'NP configurationality parameter' between them (see chapter 3). In English genitives must occupy the same position as articles and demonstratives and may be assumed to be a kind of definite determiner. However, in Chinese genitives may occur with demonstratives in pronominal position: wo de neiben shu 'my that book (= that book of mine)', Genitives in Chinese are therefore not determiners in any sense and may be assumed to have no definitizing function as determiners do. See the discussion in Lyons 1984.

9. Throughout, I have assumed that the locative PP sometimes following the NP in position 3 is not an instance of the expression of predication in position 4 but rather material intervening between positions 3 and 4.

10. In fact, sentences (69) and (70) are grammatical even when the NP in position 3 is definite — but only with an irrelevant meaning. Note the translation of (i) and (ii).

   (i) Di-shang zuo-zhe neige ren hen congming
      floor-top sit-Dur that man very clever
      'The man who sat on the floor is very clever.'

   (ii) Wo ai guo neige maren hen piaoliang
      i love-exp that woman very pretty
      'The woman I fell in love with before is very pretty.'

Existential Sentences in Chinese and (Indefiniteness)

In each case the sequence 'that man' or 'that woman' is taken to be the head of the subject of the entire sentence and the string preceding it is a relative clause modifying it. That is, 'that man' and 'that woman' are not in position 3; instead, each is the head of a relativized NP in position 1.

11. The following sentences provide further evidence that the DE obtains with (dis)appearance sentences only when the postverbal NP is in focus.

   (i) Zeme hui fasheng zhejian chenhuo ne?
      how can happen this accident Prt
      'How could this accident happen?'

   (ii) Shenme shihou fasheng zhejian shi de?
      what time happen this matter Prt
      'When did this thing happen?'

Since the focus is on 'how' and 'when', no DE is observed here.

12. There is a point of similarity between this account and a suggestion made by Szabolcsi (1984). Szabolcsi shows that, in Hungarian, the DE associated with an existential sentence with a 'particular-fasion verb' may be neutralized when something 'extra' is added to the sentence, and she suggests that the 'extra' has the effect of 'highlighting' the nonexistent part of the sentence. In the present case verbs other than you express something more than existence, and this 'extra' may neutralize the DE in certain contexts.

13. One may want to extend the lexical-semantic approach to cover even the DE facts regarding you-sentences. One possibility is to postulate that there are two distinct you's, one expressing possession and the other existence. Recall that when you takes a possessor as subject, as in (52), it does not exhibit the DE. We may assume that this is because possessive you is not purely existential and is on a par with existential verbs of the third type, which also do not exhibit the DE. As for cases like (53), in which the subject position is filled with a locative NP but no genuine possessor is implied, we may postulate that the verb is still a possessive you taking a location as its possessor in some extended sense (compare The table has a book on it). If so, then the lack of the DE in (53) can be explained on a par with that in (52).

14. Since specific NPs are 'positive polarity items,' in sentences like (i) the object NP must be construed as having wide scope with respect to negation.

(i) John didn't see a certain man

Compare (i) with (85), which is ill-formed. This contrast in grammaticality appears to stem from the fact that whereas in English the scope order of quantifiers and other logical elements may often be the inverse of their order in surface structure, this is in general impossible in Chinese (Huang 1982: chap. 3).