The issue of word classes, or parts of speech, or lexical categories, has been problematic in Chinese since the beginnings of grammatical study of the language. The central issue is that the lexical categories needed for describing Chinese do not seem to be the same as those needed for most Western languages. For example, many forms such as bīng can either be used as a 'noun' (sickness) or as a 'verb' (sick), as shown in examples (1) and (2).

(1) wǒ bīng le
   I sick PERFECTIVE
   'I am sick'

(2) zhèi zhōng bīng hěn nán zhǐ
    this type sickness very hard cure
    'This type of sickness is very hard to cure'

Furthermore, it is not clear whether the category 'adjective' is useful for Chinese. Adjectives in Chinese behave exactly as do intransitive verbs: they do not occur with a copula, and they can be negated just as verbs can be, as shown in (3) and (4).

(3) wǒ hěn gāoxìng
    I very happy
    'I am very happy'

(4) wǒ bu gāoxìng
    I not happy
    'I am not happy'

In most discussions of Chinese such forms have in fact been called 'stative verbs'.

Similarly, it is not clear that Chinese has a category of 'preposition', since what look like prepositions in English are often found as the main predicates. Thus zài in (5) looks like a preposition, but in (6) it appears to be the main verb.

(5) háizi zài chūfáng - lǐ kū
    child at kitchen - in cry
    'The child is crying in the kitchen'

(6) háizi zài chūfáng - lǐ
    child at kitchen - in
    'The child is in the kitchen'

This type of mis-match between the lexical categories needed for the description of two very different languages poses obvious problems for the construction of a bilingual dictionary. Not only
must the dictionary maker be concerned about how to indicate the
category of the entry in question, but what to offer as the best
translation of a given word also becomes an issue. How, for
example, should a word like bing, shown above in (1) and (2), be
categorized in terms of its lexical category? And what should
its translation be, 'sick' or 'sickness'?

In this paper, I will not attempt directly to solve this
problem, but I will try to offer some perspectives on the question
of lexical categories in two very different languages from recent
work in linguistics which bears on this issue.

Most of the standard Chinese-English bilingual dictionaries
have taken the position that lexical categories must be defined
separately for each language. However, none that I know of actually
propose eliminating the categories of noun and verb.

The linguist James Tai (1982), however, suggests just this,
though he is addressing the question from a linguistic point of
view rather than from a lexicographical one. Tai suggests that
lexical categories well-known from English cannot be defined for
Chinese because there is no inflectional morphology in terms of
which they can be identified. Thus, in English, verbs can be
identified in terms of person-number agreement and tense marking
on the verb, and nouns can be identified in terms of their ability
to occur with plural morphemes. But Chinese has neither person-
number agreement nor tense marking for verbs and it has no
singular-plural distinction for nouns.

Tai proposes a solution to this problem in terms of a dis­
tinction between what Lyons (1968) called 'primary grammatical
categories' and 'functional categories'. Primary grammatical
categories for Lyons are the traditional parts of speech, that
is, noun, verb, preposition, adverb, etc., while functional
categories include such notions as subject, object, predicate, etc.

Tai suggests that the lack of inflection in Chinese makes
it impossible to define 'primary grammatical categories' for
Chinese. Instead, he proposes that Chinese must be described in
terms of three functional categories. The category 'predicate'
includes what might be called verbs, adjectives, auxiliaries,
and prepositions in English, all of which can serve as the 'center
of predication', that is, as the main predicate of a sentence.
Tai's other two functional categories are then defined in terms of
'predicate'. Adverbs and prepositional phrases which cannot serve
as the center of predication form a category called 'modifier
of the predicate', while the category 'argument' includes all
forms which function as subject or object to the predicate.

I think that most lexicographers would not be inclined to
adopt Tai's proposal for identifying forms in a bilingual dic­
tionary, no matter what its linguistic merits might be. For one
thing, the user of such a dictionary needs more, rather than
fewer, categories to help in identifying words and their possible
uses.

Another linguist, Claudia Ross (1983), offers a somewhat
less radical solution to the question of grammatical categories
in Chinese. Seeking criteria for categories which do not depend on inflectional morphological markers such as those found in English and other Indo-European languages, she suggests several Chinese-based criteria:

(1) Nouns take specifiers, do not take objects, and cannot be negated, as shown in (7) below.

(2) Verbs do not take specifiers, but may take objects, and can be negated, as shown in (8).

(7a) zhèige háizi
    this child
    specifier + noun

(7b) *háizi shū
    child book
    noun + object

(7c) *bu háizi
    not child
    neg. + noun

(8a) *zhèige chī
    this eat
    specifier + verb

(8b) chī dòufu
    eat bean-curd
    verb + object

(8c) bu chī
    not eat
    neg. + verb

According to these criteria, as far as Ross is concerned, then, both adjectives and prepositions fall under the category of 'verb', since they do not take specifiers, and can be negated. Thus, (9) shows that adjectives like gāoxìng cannot be specified but can be negated, while (10) shows that a preposition like gēn cannot be specified but can be negated.

(9a) *wǒ bu mǐngbāi zhèige gāoxìng
    I not understand this happy ('I don't understand this happy')

(9b) wǒ bu gāoxìng
    I not happy
    'I'm not happy'

(10a) *wǒ zhèige gēn tā shuō - huà
    I this with s/he speak-word
    ('I this speak with him/her')

(10b) wǒ bu gēn tā shuō - huà
    I not with s/he speak-word
    'I'm not speaking with him/her'
If we compare Tai's and Ross's approaches to lexical categories we see that they come to quite different conclusions about the differences between English and Chinese. According to Tai, English has primary grammatical categories like noun, verb, adverb, etc., while Chinese has only the functional categories 'predicate', 'modifier or predicate', and 'argument'. Ross, on the other hand, proposes that English and Chinese have the same types of categories, but English requires more of them than Chinese, since such categories as preposition and adjective are not needed for Chinese.

Both of these approaches, though, as different as they are, share an assumption which I would like to question. This assumption is that the lexical categories of a language are fixed, that a form either is or is not a member of a given category, whether it be a category like noun, verb, and adjective, or one like predicate and argument. Recent research conducted by Paul Hopper and myself (Hopper and Thompson 1984) on lexical categories suggests that the extent to which a form is a member of a lexical category is entirely a matter of the discourse context in which it occurs.

Our research shows that the categories of noun and verb are universal, and that every language has these two categories because the work they do is work that every language must have a way to do. We suggest that the categories noun and verb can be thought of in terms of their prototypical functions in discourse. Then we predict that the extent to which a given form is a noun or verb depends precisely on the extent to which it is serving this prototypical function. Let us see how this helps to understand these categories of noun and verb in English and Chinese.

We suggest that the prototypical function for nouns is to introduce new participants into the discourse, while the prototypical function for verbs is to report discourse events. What this means for lexical categories is that when a noun is not functioning to introduce new participants into the discourse, it will simply be less of a noun, as defined by the grammar of the language in question. Similarly, when a verb is not reporting a discourse event, it will accordingly be less of a verb, again, as defined by the grammar of the language.

Let us consider a pair of examples from English and from Chinese to make our point. If we compare the sentences in (11) and (12), we can see that in (11) the form bear is serving in a prototypical noun function, introducing a new participant into the discourse.

(11) I saw a huge bear lumbering towards our picnic table.

In (12), on the other hand, we have what might appear to be a noun in the form bear, but it is not introducing any participant into the discourse; in fact, there is no bear to be referred to at all:

(12) Let's go bear-trapping this afternoon.
Corresponding to these differences in the way the form bear functions in these two contexts, we see that, according to English grammatical criteria, the form bear in (12) is much less of a noun than that in (11); (13a) shows that it cannot be pluralized, and (13b) shows that it cannot be specified with this, for example.

(13a) *Let's go bears-trapping this afternoon.
(13b) *Let's go this bear-trapping this afternoon.

Similarly, if we compare the use of the form travel in (14) and (15), we discover an analogous situation. In (14) the form travel is functioning to report an actual event in the discourse context:

(14) We travelled from Nottingham to Exeter.

In (15), on the other hand, the form travel does not report any event of travelling, but rather tells us what kind of salesman my uncle is:

(15) My uncle is a travelling salesman.

The hypothesis I have been developing predicts that the form travel in (14) is much more of a verb in English than is that in (13), and indeed, we find that while travelled in (14) occurs in the past tense and could be negated, the form travelling cannot appear in any other form and cannot be negated, as shown in (16) and (17).

(16) *My uncle is a travels salesman.
(17) *My uncle is a not travelling salesman.

Turning to Chinese, we see that the situation is precisely the same. Consider first a context in which a form is used to introduce a participant into the discourse, let us say 'book', as in (18).

(18) wǒ zài zǎopén fāxiàn yī - běn shū
'I discovered a book in the bathtub'

One of the hallmarks of nounhood in Chinese is the ability to occur with a numeral and classifier, as illustrated by the yī-běn in (18); another hallmark of nounhood is, as Ross (1983) suggested, the ability to take a specifier. A form which introduces a participant into the discourse can also occur with a specifier such as zhèi - 'this', as shown in (19).

(19) wǒ zài zǎopén fāxiàn zhèi - běn shū
'I discovered this book in the bathtub'

Suppose, however, that the very same form occurs in a discourse context in which it does not introduce a participant into the discourse, as in (20).
Here, no actual book is being discussed at all; the form shū in (20) is being used to tell what kind of bag was torn. Accordingly, we find that shū in the context of (20) has none of the properties of nouns in Chinese; it cannot occur with classifiers, as (21) shows, and it cannot occur with specifiers, as (22) shows.

\[
\begin{align*}
(20) & \quad wō sī - le zhèi - ge shū - bāo \\
& \quad I \text{ tear-PERFECTIVE this - CLASSIFIER book-bag}
\end{align*}
\]

'I tore this book-bag'

Here, no actual book is being discussed at all; the form shū in (20) is being used to tell what kind of bag was torn. Accordingly, we find that shū in the context of (20) has none of the properties of nouns in Chinese; it cannot occur with classifiers, as (21) shows, and it cannot occur with specifiers, as (22) shows.

\[
\begin{align*}
(21) & \quad *wō sī - le yi - bēn shū - bāo \\
& \quad I \text{ tear-PERFECTIVE one - CLASSIFIER book - bag}
\end{align*}
\]

Here, no actual book is being discussed at all; the form shū in (20) is being used to tell what kind of bag was torn. Accordingly, we find that shū in the context of (20) has none of the properties of nouns in Chinese; it cannot occur with classifiers, as (21) shows, and it cannot occur with specifiers, as (22) shows.

\[
\begin{align*}
(22) & \quad *wō sī - le zhèi - bēn shū - bāo \\
& \quad I \text{ tear-PERFECTIVE this - CLASSIFIER book - bag}
\end{align*}
\]

Here our point is especially clear: the classifier bēn in Chinese goes only with books; since the only classifier that can be used with shū-bāo in (20) is ge and not bēn, we have excellent evidence that shū is simply not functioning as a noun in (20). And of course, our intuitions as people who study language concurs with this finding.

The situation is similar for verbs. Recalling that the prototypical function for verbs is to report an event, we predict that a form which is serving this function will have the properties of verbs in Chinese, while the same form which does not have this function will not have these properties. Now consider kāi in (23) and (24).

\[
\begin{align*}
(23) & \quad wō kāi - le yi - guō shuī \\
& \quad I \text{ boil - PERFECTIVE one - pot water}
\end{align*}
\]

'I boiled a pot of water'

\[
\begin{align*}
(24) & \quad qīng nǐ gěi wō yi - bēi kāi - shuī \\
& \quad \text{Please you give I one - cup boil - water}
\end{align*}
\]

'Please give me a cup of boiled water'

While the form kāi reports a bona-fide event of boiling in (23), the exact same form in (24) does no such thing, but rather tells us what kind of water is being requested.

Just as we would expect, while kāi in (23) occurs with a perfective aspect marker, and could be negated, the kāi in (24) cannot occur with any aspect morpheme and cannot be negated, as shown in (25) and (26).

\[
\begin{align*}
(25) & \quad *qīng nǐ gěi wō yi - bēi kāi - le shuī \\
& \quad \text{please you give I one - cup boil - PERFECTIVE water}
\end{align*}
\]

\[
\begin{align*}
(26) & \quad *qīng nǐ gěi wō yi - bēi bu kāi - shuī \\
& \quad \text{please you give I one - cup not boil - water}
\end{align*}
\]

Thus for Chinese, just as for English, these facts suggest very strongly that lexical categories cannot be determined by examining forms in isolation. That is, rather than asking whether bear is or is not a noun, perhaps we should be asking what the manifestations are of forms which are introducing participants
into the discourse. The answer to this question will vary from one language to another, but the important point is that the question is the same. In this view, Chinese and English differ from each other not so much in the types of categories necessary for describing each language, but in the particular manifestation of nounhood and verbhood which each language displays under the appropriate discourse conditions.

References

Hopper, P. and Thompson, S.A. (1984) "The discourse basis for the categories 'noun' and 'verb' in universal grammar" Language 60

