SOME REMARKS ON VERB CLASSIFICATION* IN MANDARIN CHINESE*

by

Lillian Huang

I. INTRODUCTION

In Mandarin Chinese, Nouns have no case marking and Verbs show no person or number agreement with the Subject. The language, therefore, relies very heavily upon word order to designate various communicative goals. As a result, the word order in Mandarin Chinese is relatively fixed for communication of specific semantic domains.

Although almost all Chinese syntactic patterns have Subject preceding Verb (regardless of the relative position of other elements of the sentence), there also exists an 'Inverted-Subject'1 construction in the language. This construction is limited in the Verbs it allows. For example, Verbs like si ‘die’, tang ‘lie’ and gua ‘hang’ can occur in this construction, as seen in b-sentences in (1–3), while Verbs like ku ‘cry’, tiao ‘jump’ and zhidao ‘know’ can not, as shown by the unacceptable b-sentences in (4–6).

(1) a. Ren si le
      person die LE
      ‘The person died.’

     b. Si ren le
die . person LE
      ‘Someone died.’

(2) a. Xiaohar tang zai chuang-shang.
      child lie at bed -top
      ‘The child is lying on the bed.’

     b. Chuang-shang tang zhe xiaohar.
      bed -top . lie ZHE child
      ‘There is a child lying on the bed.’
In this paper, we will present a partial semantic structuring among some Verbs in Mandarin Chinese, and relate this structure to the syntax of Verbs in the language. More specifically, we will show that semantic concepts, such as PERIODICITY, ATOMICITY, and VENUEHOOD, predict certain syntactic manifestations of the Verbs. Finally, we will show that this model explains which Verbs may occur in the Inverted-Subject construction.

2. SEMANTIC NATURE OF VERBS IN MANDARIN CHINESE

Following Davis's PERIODICITY model, we consider that the period of time required for a recurrence of an EVENT varies from Verb to Verb; this variation defines PERIODICITY. In terms of PERIODICITY, Chinese Verbs can be classified as Verbs of
short PERIODICITY, mid-PERIODICITY and long PERIODICITY, as illustrated in Figure 1.

<table>
<thead>
<tr>
<th>short PERIODICITY</th>
<th>mid-PERIODICITY</th>
<th>long PERIODICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>si ‘die’</td>
<td>pao ‘run’</td>
<td>zhidao ‘know’</td>
</tr>
<tr>
<td>pao ‘escape’</td>
<td>ku ‘cry’</td>
<td>liaojie ‘understand’</td>
</tr>
<tr>
<td>shuai ‘fall down’</td>
<td>chi ‘eat’</td>
<td>xiangxie ‘believe’</td>
</tr>
<tr>
<td>dao ‘fall’</td>
<td>jiao ‘shout/name/be named’</td>
<td>gao ‘tall’</td>
</tr>
<tr>
<td>tiao ‘jump’</td>
<td>chuan ‘put on/wear’</td>
<td>hao ‘good’</td>
</tr>
<tr>
<td>di ‘drip’</td>
<td>gua ‘hang (up)’</td>
<td>shi ‘be’</td>
</tr>
<tr>
<td>da ‘hit’</td>
<td>tang ‘lie (down)’</td>
<td>zai ‘be at/in’</td>
</tr>
</tbody>
</table>

**Figure 1**

Here we find that Verbs like *si* ‘die’, *pao* ‘escape’, *shuai* ‘fall down’, *dao* ‘fall’, *tiao* ‘jump’, *di* ‘drip’ and *da* ‘hit’ all have relatively short PERIODICITY. We note, moreover, that there are at least two types of short-PERIODICITY Verbs. Verbs like *si* ‘die’ and *pao* ‘escape’, because of their ATOMIC, or unrepetitive, character, can be treated as having almost no internal semantic extension (i.e. their PERIODICITY is nearly zero), and hence appear at one extreme—the extreme of short PERIODICITY. Other Verbs of short PERIODICITY, such as *tiao* ‘jump’, *di* ‘drip’ and *da* ‘hit’, are potentially repetitive. This is why Verbs with the ATOMIC feature require the co-occurrence of *le*, the PERFECTIVE Aspect marker, and are incompatible with the IMPERFECTIVE Aspect marker *zai/zhe*, this will be discussed in depth later on.

Mid-PERIODICITY Verbs like *pao* ‘run’, *ku* ‘cry’, *chuan* ‘put on/wear’ and *gua* ‘hang (up)’, have relatively longer PERIODICITIES than *tiao* ‘jump’ and the like. They also, coincidentally, fall into two classes. Verbs like *pao* ‘run’, *ku* ‘cry’ and *chi* ‘eat’ designate only ACTIVE EVENTS. These Verbs can co-occur with the IMPERFECTIVE Aspect marker *zai*. For instance,

(7) a. Ta zai pao.

he ZAI run
“He is running.”
b. Ta zal ku.
he ZAI cry.
‘He is crying.’

c. Ta zai chi (fan).
he ZAI eat rice
‘He is eating.’

In contrast, Verbs like “chuan ‘put on/wear’’, gua ‘hang (up)’ and tang ‘lie (down)’”, manifest internal semantic structures that are more complex than those of other mid-PERIODICITY Verbs. They can designate two states: one ACTIVE and the other STATIVE (i.e. RESULTATIVE). For instance, chuan can indicate an ACTIVE EVENT ‘put on’ and is also compatible with zai, the IMPERFECTIVE Aspect marker.

(8) a. Ta zai chuan yifu.
he ZAI put on clothes
‘He is putting on the clothes.’

When designating ACTIVE EVENTS, these Verbs semantically resemble short-PERIODICITY Verbs like tiao ‘jump’. On the other hand, these Verbs may describe less ACTIVE, i.e. RESULTATIVE, EVENTS like ‘wear’, ‘hang’ and ‘lie’. For example, consider the following sentence,

(8) b. Ta chuan zhe yifu.
he wear ZHE clothes
‘He is wearing clothes.’

The static situation of his wearing clothes is the resultant state of his putting on the clothes. Verbs indicating resultant states have comparatively longer PERIODICITIES. Finally, Verbs like zhidao ‘know’, gāò ‘tall’, etc., have even longer PERIODICITIES. They designate STATES instead of ACTIONS.

We thus see that Verbs have differing internal semantic structures, which can be schematized as follows.
As indicated above, d-type Verbs, like chuan ‘put on/wear’, gua ‘hang (up)’ and tang ‘lie (down)’, with their complex internal structures, may designate either ACTIVE EVENTS or more STATATIVE EVENTS, depending on which sense they denote. Though these Verbs have very similar complex internal semantic structures, as shown in Figure 2, they do not have exactly the same lengths of PERIODICTIES, which is indicated by their different compatibility with the IMPERFECTIVE Aspect marker zai. For example, while Verbs designating ACTIVE EVENTS, like chuan ‘put on’ and gua ‘hang up’, are compatible with zai, as shown in (8a) (repeated below and (9),

\[(8)\text{ a. } \text{Ta zai chuan. yifu.} \\
\text{he ZAI put on clothes} \\
\text{‘He is putting on the clothes.’}\\
\text{(9) Ta zai gua hua.} \\
\text{he ZAI hang up picture} \\
\text{‘He is hanging a picture (/pictures).’}\\
\]

Verbs like tang ‘lie down’ are not, as given in (10).

\[(10) \text{*Ta zai tang.} \\
\text{he ZAI lie down}\\
\]
When designating ACTIVE EVENTS, Verbs such as tang ‘lie down’ are perceived to indicate very abrupt ACTIONS which are similar to EVENTS like si ‘die’ or pao ‘escape’, and are present at the short-PERIODICITY extreme. Accordingly, they are incompatible with zai, as shown in (10).

With respect to their differing PERIODICITIES, Verbs in Mandarin Chinese designate different EVENTS and may constitute a continuum, as illustrated in Figure 3.

<table>
<thead>
<tr>
<th>short PERIODICITY</th>
<th>long PERIODICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>si</td>
<td>tiao</td>
</tr>
<tr>
<td>‘die’</td>
<td>‘jump’</td>
</tr>
<tr>
<td>pao</td>
<td>di</td>
</tr>
<tr>
<td>‘escape’</td>
<td>‘drip’</td>
</tr>
<tr>
<td>tang</td>
<td>da</td>
</tr>
<tr>
<td>‘lie down’</td>
<td>‘hit’</td>
</tr>
</tbody>
</table>

In addition to PERIODICITIES, Verbs in Mandarin Chinese can be subgrouped in terms of a verbal feature VENUEHOOD. In order to understand the VENUEHOOD feature, we have to examine the characteristics of Locatives first. According to Hou (1977, 143–44), there are two types of Locatives in the language: the scene-setting Locative and the resultative Locative. The scene-setting Locative denotes the location where the EVENT takes place. Since EVENTS almost always can take place in some location, almost all Verbs may take the scene-setting Locative. For example,

(11) a. Tz zai yiyuan-li si le.
    he at hospital-inside die LE
    ‘He died in the hospital.’

b. Ta zai chuang-shang tiao.
    he at bed-top jump
    ‘He is jumping on the bed.’

c. Ta zai xuexiao-li pao (bu).
    he at school-inside run (step)
    ‘He is running in the school.’
d. Ta zai fangjian-li gua le hen du duo hua, i.e. he at room -inside hang LE very-many picture 'He hung many pictures in the room.'

e. Ta, zai, xuexiao-li zhidao le zhe jian shi. he, at, school -inside know LE this-CL thing 'He heard about this thing in the school.'

The resultative Locative, as Hou characterizes it, denotes 'the location that the recipient of the action reaches as a result of an action.' Expanding Hou's model, the resulative Locative in this paper is treated in a broader sense: it is seen as indicating either the location of an EXPERIENCER (i.e. Hou's recipient), or the location reached by an EXECUTOR after the ACTION takes place. For instance,

(12) b. Ta tiao zai di -shang.
he jump at floor-top
'He jumped onto the floor.'

The Locative di-shang 'floor' indicates the location ta 'he' reached after the EVENT 'jump'. Here ta 'he' is the EXECUTOR of the ACTION 'jump', but not an EXPERIENCER.

As we may expect, not all Verbs/EVENTS are compatible with a resultative Locative. Observe the following sentences,

(12) a. Ta shuai zai di -shang.
he fall down at floor-top
'He fell down on the floor.'

b. Ta tiao zai di -shang.
he jump at floor-top
'He jumped onto the floor.'

he run at school -inside

d. Ta ba hua gua zai qiang-shang.
he BA picture hang at wall -top
'He hung the picture on the wall.'
e. *Ta zhidao zai xuexiao-li.
   he know at school -inside

From the above discussion, we thus postulate that Verbs, depending on their compatibility with a resultative Locative, can be subgrouped as [+Venue] Verbs (i.e. those that take a resultative Locative) and [-Venue] Verbs (i.e. those that do not). In this way, two separate continua can be set up for Verbs in Mandarin Chinese, as illustrated in Figures 4 and 5.

(A) Verbs not possessing the feature VENUEHOOD:

<table>
<thead>
<tr>
<th>short PERIODICITY</th>
<th>long PERIODICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>si 'die’</td>
<td>yao 'bite’</td>
</tr>
<tr>
<td>pao 'escape’</td>
<td>fei 'bark’</td>
</tr>
<tr>
<td>jiao ‘shout’</td>
<td></td>
</tr>
<tr>
<td>ku 'cry’</td>
<td>mai 'buy’</td>
</tr>
<tr>
<td>jiao 'be named’</td>
<td></td>
</tr>
<tr>
<td>jiao 'name’</td>
<td>re ‘hot’</td>
</tr>
<tr>
<td></td>
<td>gao ‘tall’</td>
</tr>
</tbody>
</table>

Figure 4

(B) Verbs possessing the feature VENUEHOOD:

<table>
<thead>
<tr>
<th>short PERIODICITY</th>
<th>long PERIODICY</th>
</tr>
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<tbody>
<tr>
<td>shuai 'fall down’</td>
<td>tiao 'jump’</td>
</tr>
<tr>
<td>dao 'fall’</td>
<td>di ‘drip’</td>
</tr>
<tr>
<td>tang ‘lie down’</td>
<td>shuai ‘throw’</td>
</tr>
<tr>
<td></td>
<td>pa ‘crawl’</td>
</tr>
<tr>
<td></td>
<td>chuan ‘put on’</td>
</tr>
<tr>
<td></td>
<td>gua ‘hang up’</td>
</tr>
</tbody>
</table>

Figure 5
Understanding that different Verbs have different PERIODICITY, and that some Verbs have the feature VENUEHOOD, we can now characterize sentences like (1–3) that allow the shift in word order while others like (4–6) that do not. In Mandarin Chinese, [-Venue] Verbs such as *si* ‘die’ and *pao* ‘escape’ denote TELIC EVENTS: that is, ‘either the completion of some act or the attainment of some state is a central part of the meaning of the EVENT (TELIC).’ (Davis Ms. 313) These TELIC Verbs have the shortest PERIODICITY and are not repetitive. They always cooccur with the PERFECTIVE Aspect marker *le*, and may allow the shift in word order, as indicated in (13) as well as in (1).

1. a. Ren si le.
   person die LE
   ‘The person died.’
   b. Si ren le.
   die person LE
   ‘Someone died.’

13. a. Zei pao le.
   thief escape LE
   ‘The thief (has) escaped.’
   b. Pao le zei.
   escape LE thief
   ‘A thief (has) escaped.’

As for Verbs like *fei* ‘bark’, *ku* ‘cry’, *jiao* ‘name’, *zhidao* ‘know’ and *gao* ‘tall’, their PERIODICITIES are different and are all comparatively longer than those of TELIC Verbs, such as *si* ‘die’ or *pao* ‘escape’. They do not permit a shift in word order, as shown in (14–16) as well as in (4) and (6) (repeated here).

4. a. Keren ku le.
   guest cry LE
   ‘The guest cried.’
   b. *Ku le keren.
   cry LE guest

   Zhangsan know LE that-CL thing
   ‘Zhangsan (heard about and) knows that thing.’
b. *Na -jian shi zhidao le Zhangsan.
    that-CL thing know LE Zhangsan
(14) a. Gou fei le.
    dog bark LE
    ‘The dog (has) barked.’

b. *Fei le gou.
    bark LE dog

(15) a. Ta jiao wo Lao Huang.
    he call I Lao Huang
    ‘He calls me Lao Huang.’

b. Wo jiao ta Lao Huang.
    I call he Lao Huang
    ‘*He calls me Lao Huang.
     I call him Lao Huang.’

(16) a. Xiaohar gao le.
    child tall LE
    ‘The child is taller (now).’

b. *Gao le xiaohar.
    tall LE child

As for [+Venue] Verbs like gua ‘hang (up)’, tie ‘paste’, chuan ‘put on/wear’, tang ‘lie (down)’ and zuo ‘sit (down)’, when they designate more static EVENTS ‘hang’, ‘paste’, ‘wear’, ‘lie’ and ‘sit’, they have relatively mid-PERIODICITY and allow the shift in word order, as indicated in (17–19) as well as in (2–3) (repeated here). In addition, because of their complex internal structure (i.e. they can either designate ACTIVE EVENTS or more STATE-like EVENTS), these Verbs (when occurring pre-Locatively) may give two readings, as illustrated in the English glosses below.

(2) a. Xiaohar tang zai chuang-shang.
    child lie at bed -top
    ‘a. The child lay on the bed.
     b. The child is lying on the bed.’

b. Chuang-shang tang zhe xiaohar.
    bed -top lie ZHE child
    ‘There is a child lying on the bed.’
(3) a. Zhangsan-de hua gua zai qiang-shang.
   Zhangsan-DE picture hang at wall-top
   ‘a. Zhangsan’s picture hung on the wall.
   b. Zhangsan’s picture is hanging on the wall.’

   b. Qiang-shang gua le Zhangsan-de hua.
      wall -top hang LE Zhangsan-DE picture
      ‘On the wall hangs Zhangsan’s picture (now).’

      spring-couplet paste at door-top
      ‘a. The spring-couplets pasted on the door.
      b. The spring-couplets are pasted on the door.’

   b. Men-shang tie zhe chun-lian.
      door-top paste ZHE spring-couplet
      ‘On the door are pasted spring-couplets.’

   c. Men-shang tie le chun-lian.
      door-top paste LE spring-couplet
      ‘On the door are pasted spring-couplets (now).’

(18) a. Yifu chuan zai shen-shang.
      clothes wear at body-top
      ‘The clothes are on.’

   b. (Ta) shen-shang chuan zhe yifu.
      he body-top wear ZHE clothes
      ‘(He) has clothes on.’

   c. (Ta) shen-shang chuan le yifu.
      he body-top wear LE clothes
      ‘(He) has clothes on (now).’

      presidium sit at platform-top
      ‘a. The presidium sat on the platform.
      b. The presidium is sitting on the platform.’

   b. Tai-shang zuo zhe zhuxituan.
      platform-top sit ZHE presidium
      ‘On the platform is sitting the presidium.’

— 553 —
c. Tai -shang zuo le zhuxituan.
   platform-top sit LE presidium
   'On the platform sits the presidium (now).'

On the other hand, [+Venue] Verbs with short PERIODICITY, such as shuai 'fall down', tiao 'jump' and gua ‘hang up’, do not allow such a shift in word order. For example,

(5) a. Xiaohar tiao zai chuang-shang.
   child jump at bed -top
   'The child jumped onto the bed.'

b. *Chuang-shang tiao zhe/le xiaohar.
   bed -top jump ZHE/LE child

(20) a. Nanhar shuai zai di -shang.
   boy fall down at floor-top
   'The boy fell down on the floor.'

b. *Di -shang shuai zhe/le nanhar.
   floor -top fall down ZHE/LE boy

(21) a. Ta (zai qiang-shang) gua le hua.
   he (at wall -top ) hang LE picture
   '(On the wall) he hung a picture (pictures).'

b. *Hua gua zhe/le ta.
   picture hang ZHE/LE he

To sum up, only [+Venue] Verbs of mid-PERIODICITY and [-Venue] Verbs of short PERIODICITY can occur in the Inverted-Subject construction.

3. ASPECTUAL CORRELATION WITH VERBS

The classification of Figure 3 (as well as Figures 4 and 5) is confirmed by the presence of EVENTS that vary by PERIODICITY and that accompany this variation with a different sense, as pointed out earlier. Thus, the position of a Verb on the short-long PERIODICITY continuum may vary; that is, each sense indicates a different length of PERIODICITY and therefore has a different syntactic manifestation. Consider the following sentences,
When *dai* means ‘put on’ and *na* means ‘take’, i.e. each has short PERIODICITY, they are easily compatible with *zai*, as shown in (22a) and (23a). When *dai* reads as ‘wear’ in (22b) and *na* as ‘hold’ in (23b), i.e. they have longer PERIODICITY, they are more compatible with *zhe*, and are used to describe static situations which start immediately after the actions ‘put on’ and ‘take’ are terminated.

Nevertheless, the above discussion does not mean that Verbs of short PERIODICITY are all compatible with *zai* and not with *zhe*, and Verbs of long PERIODICITY are compatible with *zhe*. Consider the following sentences.
b. Ta ku zhe...
he cry ZHE
'H is crying...'

(27) a. Ta zai chuan yifu.
he ZAI put on clothes
'He is putting on the clothes.'
b. Ta chuan zhe yifu.
he wear ZHE clothes
'He is wearing clothes.'

(28) a. Ta zai gua hua.
he ZAI hang picture
'He is hanging a picture.'
b. Qiang-shang gua zhe hua.
wall -top hang ZHE picture
'On the wall is hanging a picture.'

he ZAI know
b. *Ta zhiao zhe.
he know ZHE

he ZAI tall
b. *Ta gao zhe.
he tall ZHE

Apparently, zai and zhe are incompatible with a TELIC EVENT, such as pao 'escape/run away' in (24), which has short PERIODICITY, and which, unlike other short-PERIODICITY Verbs tiao 'jump' and da 'hit', is not repetitive. Zai and zhe are not compatible with Verbs of long PERIODICITY, either, such as zhidao 'know' in (29) and gao 'tall' in (30). As for Verbs occurring in-between these two extremes, i.e. the extremes of short PERIODICITY and long PERIODICITY, they are compatible with both zai and zhe. The combination may (or may not) denote differing senses, determined by the internal structure of Verbs and by which part of the EVENTS is being focused on.

Furthermore, we may notice that the combination of Verbs and the IMPERFECTIVE Aspect marker can produce different readings. For instance, Verbs having short periodicity...
such as *tiao* ‘jump’ in (25) take *zai/zhe* to denote the ITERATIVE meaning (i.e. He is jumping up and down). Verbs like *ku* ‘cry’ in (26) with longer periodicity than *tiao* ‘jump’ take *zai/zhe* to designate the PROGRESSIVE meaning. As for Verbs like *chuan* ‘put on/wear’ in (27) and *gua* ‘hang (up)’ in (28), owing to their complex internal structure, they can take *zai* to denote the PROGRESSIVE meaning (e.g. (27a) and (28a)), and *zhe* to indicate the DURATIVE meaning (e.g. (27b) and (28b)). The compatibility between Verbs and *zai/zhe*, and the aspectual meanings their combination denotes can be summarized as in Figures 6 and 7.

[-Venue] Verbs:

<table>
<thead>
<tr>
<th>short PERIODICITY</th>
<th>ITERATIVE</th>
<th>PROGRESSIVE</th>
<th>DURATIVE</th>
<th>STATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TELIC) <em>zai/zhe</em></td>
<td><em>zai/zhe</em></td>
<td><em>zai/zhe</em></td>
<td><em>zai/zhe</em></td>
<td><em>zai/zhe</em></td>
</tr>
<tr>
<td>si</td>
<td>yao</td>
<td>ku</td>
<td>re</td>
<td>zhidao</td>
</tr>
<tr>
<td>‘die’</td>
<td>‘bite’</td>
<td>‘cry’</td>
<td>‘hot’</td>
<td>‘know’</td>
</tr>
<tr>
<td>pao</td>
<td>fei</td>
<td>mai</td>
<td>gao</td>
<td></td>
</tr>
<tr>
<td>‘escape’</td>
<td>‘bark’</td>
<td>‘buy’</td>
<td>‘tall’</td>
<td>jiao</td>
</tr>
<tr>
<td>jiao</td>
<td>re</td>
<td>‘heat’</td>
<td>‘be named’</td>
<td></td>
</tr>
<tr>
<td>‘shout’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6

[+Venue] Verbs:

<table>
<thead>
<tr>
<th>short PERIODICITY</th>
<th>ITERATIVE</th>
<th>PROGRESSIVE</th>
<th>DURATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TELIC) <em>zai/zhe</em></td>
<td><em>zai/zhe</em></td>
<td><em>zai/zhe</em></td>
<td></td>
</tr>
<tr>
<td>shuai</td>
<td>tiao</td>
<td>pa</td>
<td>tang</td>
</tr>
<tr>
<td>‘fall down’</td>
<td>‘jump’</td>
<td>‘crawl’</td>
<td>‘lie’</td>
</tr>
<tr>
<td>dao</td>
<td>di</td>
<td>chuan</td>
<td>chuan</td>
</tr>
<tr>
<td>‘fall’</td>
<td>‘drip’</td>
<td>‘put on’</td>
<td>‘wear’</td>
</tr>
<tr>
<td>tang</td>
<td></td>
<td>gua</td>
<td>gua</td>
</tr>
<tr>
<td>‘lie down’</td>
<td></td>
<td>‘hang up’</td>
<td>‘hang’</td>
</tr>
</tbody>
</table>
4. CONCLUDING REMARKS

As stated at the outset of this paper, although Mandarin Chinese has very rigid word order, i.e. SV(O), there exists an Inverted-Subject construction. In order to better understand this construction, we find it is important to study the nature of Verbs. In this paper, we have shown that a short PERIODICITY-long PERIODICITY continuum can be set up for Verbs in Mandarin Chinese. Furthermore, Verbs can be subcategorized in terms of a verbal feature VENUEHOOD. Consequently, we find that only [-Venue] Verbs of short PERIODICITY (e.g. si ‘die’) and [+Venue] Verbs of mid-PERIODICITY (e.g. chuan ‘wear’) can occur in the Inverted-Subject construction.

Moreover, we have demonstrated that Verbs with different lengths of PERIODICITY can be designated by their compatibility with the IMPERFECTIVE Aspect marker, either zai or zhe, and by the different aspectual meanings denoted by the combination of Verbs with the IMPERFECTIVE Aspect marker, namely, ITERATIVE, PROGRESSIVE or DURATIVE.
NOTES

This paper was first presented at the October 10–12, 1985 annual meeting of the Linguistic Association of the Southwest (LASSO) in Houston, Texas. I would like to thank Professor Philip Davis, who gave me many valuable comments and suggestions about this paper. Any mistakes in this paper, however, are mine.

1. In Mandarin Chinese, the ‘Inverted-Subject’ construction includes what many Chinese grammarians (Huang 1966, Chao 1968, Teng 1977, and Li and Thompson 1981) call Existential Sentence. Previous approaches to the Existential Sentence can be grouped under three theories: Frances Li’s Thematicity Theory (1971), Li and Thompson’s Definiteness Theory (1975), and Teng’s Modification Theory (1977). While the first two theories place more stress on the nature and the discourse function of the Noun in the construction, Teng’s focuses on the modification function of the Predicate. However, none of these approaches is satisfactory. For example, as presented in (3b) in the paper, the post-verbal Noun, i.e. Zhangsan-de hua ‘Zhangsan’s picture’ can not be interpreted as Indefinite, and this seems to contradict the claim of the Definiteness Theory, and hence against the Thematicity Theory’s postulation as well (which we do not intend to further discuss here). As for Teng’s approach, his class of ‘existential verbs’ is not clear to us. Furthermore, he does not explain why Verbs like zhan ‘stand’, gua ‘hang’, etc. should take zhe (a marker of aspectual imperfectivity), whereas Verbs like lai ‘come’, si ‘die’, etc. have to cooccur with le (a marker of perfectiveness), but not zhe in the construction, which will be discussed later in the paper.

2. I owe these two terms and ideas to Davis.

3. I adopt the term [Venue] from Chen (1978b). For her, the feature [Venue] is venue-oriented or physical contact involved.

4. Although the present study of Chinese Verbs follows Davis’s periodicity model, we find that Verbs in Mandarin Chinese and English do not work in the same way. According to Davis (Ms. 250–60), two parameters for classifying English Verbs, namely, the parameter of ACTIVE-STATATIVE and that of short-long periodicity are parallel, thus (Davis Ms. 262),

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>STATIVE</th>
</tr>
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<tbody>
<tr>
<td>SHORT</td>
<td>LARGE</td>
</tr>
<tr>
<td>PERIODICITY</td>
<td>PERIODICITY</td>
</tr>
</tbody>
</table>

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However, this is not the case with Verbs in Mandarin Chinese. For instance, TELIC EVENTS/Verbs *shuai* ‘fall down’ and *si* ‘die’ have short periodicity and so do Verbs like *tiao* ‘jump’ and *da* ‘hit’. Yet while *tiao* ‘jump’ and *da* ‘hit’ describe ACTIVE EVENTS, and hence can cooccur with *zai/zhe*, the IMPERFECTIVE Aspect markers, *shuai* ‘fall down’ and *si* ‘die’ designate more STATE-like EVENTS, which is confirmed by their incompatibilities with *zai/zhe*. Accordingly, the two parameters, i.e. ACTIVE-STATATIVE and short-long periodicity are not parallel in Mandarin Chinese.

5. These Verbs are not repetitive in the sense that ‘a person will not die twice or more times’, ‘a prisoner will not reescape unless he is caught and escapes again’, and ‘once a person fell down on the floor, he has to get up before he falls again,’ which will be expressed by using an Adverb *you* ‘again’,

(1) Ta *you* shuai -le.
    he again fall down-LE
    ‘He fell down again.’

6. There remains disagreement concerning whether *zai* and *zhe* are both IMPERFECTIVE Aspect markers. See Chen (1978a), Li and Thompson (1981) and Chu (1983) for further discussion.

7. Teng (1975.31) also postulates that there are two types of Locatives: the inner Locative and the outer Locative. However, it seems that Teng (1975.10) in characterizing the two types of Locatives relies on their relative positions to the Verb in a sentence. Hence, we agree more with Hou’s treatment as discussed in the paper.

8. (17a-c) are not “passive sentences” in Mandarin Chinese although the English gloss may give such an impression. A passive sentence in Mandarin Chinese will have the cooccurrence of the marker *bei*, as shown in the following sentence.

(1) Chun -lian bei tie zai men -shang.
    spring-couplet BEI paste at door-top
    ‘The spring-couplets are pasted on the door.’

9. That [+Venue] Verbs of mid-PERIODICITY can take either *zhe* or *le* in an Inverted-Subject construction is because of their internal semantic structure,

\[
\begin{align*}
 & \text{le} \quad \text{zhe} \\
 & \quad \quad \text{le}
\end{align*}
\]

*le* in this case marks the beginning of the resultant phase, while *zhe* is to focus on the mid-point of that static situation. For details, see Davis and Huang.
10. Although these Verbs are compatible with zai and zhe, speakers of Chinese feel that a sentence with a Verb taking zhe seems to require that more sentences follow; by itself the meaning seems incomplete. Further study is needed.
REFERENCES


Davis, Philip. Prolegomena to a grammar of English.


中文語動詞分類

摘要
中文動祠分類之一二 黃美金

中文裡，名詞沒有表示「格」的標誌，動詞也不能指出主詞（和受詞）的人稱或數
複數，是故字詞在句中的位置不能任意更改，而詞序在中文句法的研究中益形重要。

一般說來，主詞出現在動詞的前面，但是中文裡亦存在有一「主動顛倒」的結構，
例如:
(1) a 人死了。
    b 死人了。
(2) a 小孩躺在床上。（主一動一…）
    b 小孩躺着小孩。（…一動一主）

不過並不是所有的動詞均可出現在此結構中，譬如:
(3) a 客人哭了。
    b 哭客人了。
(4) a 張三知道了那件事。
    b 那件事知道了張三。

為了解釋何以僅部份動詞可以出現在「主動顛倒」的句型中，我們應該要先對中文
動詞的語意構造作一研究，進而探討其子句法結構之關係（當然此種句型之「交談功能
」亦不容忽視），在本文中我們

僅就 PERIODICITY，
ATOMICITY 及 VENUEHOOD 等語意特性，把中文動詞稍加分類；我們認為惟具有【
-VENUE，SHORT PERIODICITY 】及【 + VENUE，MID-PERIODICITY 】特性
的動詞方能出現在「主動顛倒」的句型中，另外，我們亦指出動詞之具有不同的
PERIODICITY 可由其之能否與「在」或「著」並存，加以印證。

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