ON CHINESE WORD ORDER AND WORD ORDER CHANGE

by

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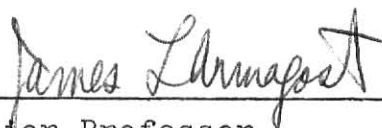
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I. Introduction

Although word order of major constituents plays an important role in grammar, it has not been seriously studied. In early transformational works, it was generally assumed without justification that word order in surface structures, especially those of simplex sentences, was identical to that in the base structures. Thus English has SVO word order. So do French and Chinese. And Japanese and Turkish then would have SOV word order. Greenberg's (1966) pioneer work has had a very great influence on the study of word order and language universals. However, it is not until the appearance of Ross' (1966) "Gapping and Order of Constituents" that word order begins to gain more attention in current studies, as his paper is within the framework of transformational grammar. The school of generative semantics, which suggests that the logical structure is the deep structure, has also had a very great influence on the studies of word order. Sanders (1969) proposes a strong theory (Invariant Ordering) hypothesizing that base structures are unordered and the different surface word orders are derived from the unordered base structures through regrouping and reordering. McCawley's (1970) important paper "English as a VSO language" has also been having a tremendous effect on the studies of word order and also the transformational component. His proposal that English is a VSO language and that there are only two word orders in all natural languages,

namely VSO and SOV, departs from the traditional assumption that the surface structures are generally identical to the base structures, and also raises many arguments. Then there have been many papers on the problems of word order, most of which justify their hypotheses with external evidence only (i.e. the statistical universals of word order, gapping and so on.)

Chinese surface structure exhibits both SOV and SVO word order. It has been generally assumed that the underlying word order of Chinese is SVO and that the SOV word order is derived from SVO through a rule of NP-V inversion. Tai (1973) proposes a hypothesis that the underlying word order of Chinese is not SVO, but SOV. He justifies his hypothesis with both internal and external evidence. However, I find Tai's theory and arguments unconvincing and will argue that Chinese is an SVO language.

Furthermore, I will discuss the problem of word order shift in Chinese. The confusion of word order in Modern Chinese is largely due to an on-going word order shift from SVO to SOV. I will present some evidence for this shift and discuss some recent hypotheses, especially those of Li (1975) and Li and Thompson (1974, 1975).

In discussing the word order of Chinese, I will assume that there is a level in this particular language at which all lexical items are inserted and which may be different

from other languages. Thus, I will ignore the unordered base
hypothesis proposed by Sanders (1969) and the strong universal
base hypothesis which claims that the base rules of every
language are exact the same.

II. Against Tai's Chinese as SOV Hypothesis

1. Introduction

In surface structure, Chinese exhibits both SOV and SVO word orders. Tai (1973) proposes that the underlying word order of Chinese is SOV, and SVO word order is derived from SOV through a rule of NP-V inversion. Tai further claims that his theory is based on two grounds. "First, it is able to simplify the grammatical description of Chinese by eliminating otherwise necessary language-specific rules and constraints. Second, it is capable of providing an explanation of great value for a large number of syntactic differences with respect to word order between Chinese and English on the one hand and similarities in word order between Chinese and Japanese on the other hand" (p. 659)

Here, I would like to argue that Tai's theory cannot simplify the description of Chinese grammar and that his arguments that Chinese is similar to Japanese in some syntactic process cannot establish that Chinese has underlying SOV word order like Japanese.

2. Ba and bei

2.1. One of Tai's major arguments for his theory is based on the ba and bei constructions.

(1)   wo dale   Zhangsan
         I hit-asp. Zhangsan
         "I hit Zhangsan."

(2)   wo ba Zhangsan dale
            object marker
         "I hit Zhangsan."

(3)   Zhangsan <u>bei</u> wo dale
                passive marker
         "Zhangsan was hit by me."

Tai claims that no matter whether Chinese has underlying

SOV or SVO word order, it needs a rule to invert the object

and the verb. If Chinese is SVO, then the NP-V inversion

rule would prepose the object to the front of the verb to

get (2) from (1). If Chinese is SOV, then the base form

is (2), and the NP-V inversion rule would move the object

to the right of the verb to get (1).

The main point here concerns a passive sentence like

(3). Tai says (p.p. 660-1):

> Although the passive rule is needed in both grammars,
> it can be shown that while the passive rule in gram-
> mar A (i.e. SVO) has to be treated as a language-
> specific rule in Chinese, the passive in grammar B
> (i.e. SOV) can be regarded as identical to that of
> English...the passive rule in both languages can
> be considered as essentially involving the change
> of SO order into OS order...we can further assume
> that Chinese and English have the same passive rule
> which is essentially a process of switching the
> order between subject and object. This kind of as-
> sumption is only compatible with grammar B and not
> with grammar A.

How the rule of passive, in SVO order, has to be treated as

a language-specific rule in Chinese Tai doesn't show us. I

would like to argue that sentences like (2) cannot be the

basic form of Chinese and that the passive rule would be

equally simple no matter which word order Chinese has.

2.2.   First, it should be pointed out that sentences with <u>ba</u>
are very limited and constrained.[1] The precise constraints
on the <u>ba</u> construction are not our concern here. But we will
survey them briefly and establish that the <u>ba</u> construction
cannot be the basic form.

(4)   <u>wo kan-jian Zhangsan</u>
         I   see   Zhangsan
         "I saw Zhangsan."

(5)   *wo ba Zhangsan kan-jian

(6)   wo <u>fa   shau</u>
            develop fever
         "I develop a fever; I have a fever."

(7)   *wo ba shau fa

(8)   Zhangsan <u>pa   lei   sheng</u>
                  fear thunder noise
         "Zhangsan is afraid of thunder noise."

(9)   *Zhangsan ba lei sheng pa

(10)   <u>Li-si shide Zhangsan hen   gau-hsin</u>
         Li-si cause-extent   very   happy
         "Li-si cause Zhangsan (to feel) very happy."

(11)   *Li-si ba Zhangsan shide hen gau-hsin

Notice that the <u>ba</u> construction can appear with certain verbs
only. The class of verb that allows the <u>ba</u> construction, as
Li (1969) observes, is the process-action verb like

(12)   Zhangsan <u>tule   shu</u>
                  read-asp. book
         "Zhangsan has read the book."

(13)   Zhangsan ba shu tule

(14)   Zhangsan <u>shale Li-si</u>
                  kill-asp.
         "Zhangsan killed Li-si."

───────────────────────────────

(1) See Chao (1968) and Teng (1975).

(15)   Zhangsan ba Li-si shale

The ba construction is also restricted in occurence
with the aspect and tense, appearing mostly with the per-
fective (including past, present, and future) or with the
meaning of completion.

(16)   wo da Zhangsan
               hit (pres)
            "I hit Zhangsan."

(17)   *wo ba Zhangsan da

(18)   wo dale Zhangsan
               hit-asp.
            "I have hit Zhangsan."

(19)   wo ba Zhangsan dale

(20)   wo zai   zi zie-se fan
               progressive marker eat this rice
            "I am eating this rice."

(21)   *wo zai ba zie-se fan zi

(22)   wo zai zi-del zie-se fan
                   eat-away
            "I am eating up this rice."

(23)   wo zai ba zie-se fan zi-del

(24)   wo mingtien zi zie-se fan
               tomorrow
            "Tomorrow I will eat this rice."

(25)   *wo mingtien ba zie-se fan zi

(26)   wo mingtien zi-del zie-se fan
            "Tomorrow I will have eaten up this rice."

(27)   wo mingtien ba zie-se fan zi-del

So the ba construction is limited to a specific class of verbs
and tense. It is also restricted to certain compounds only.[2]

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(2) The compounds here are the verbs with adverbs.

(28)   <u>ta yau da</u> Zhangsan
             he has to hit Zhangsan
             "He has to hit Zhangsan."

(29)   *?ta yau ba Zhangsan da

(30)   ta yau <u>nang-nang-de</u> da Zhangsan
                  fiercely
             "He has to hit Zhangsan fiercely."

(31)   ta yau ba Zhangsan nang-nang-de da

(32)   Zhangsan <u>shi-wang kan fangzi</u>
              hope   see house
             "Zhangsan hopes to see the house,"

(33)   *Zhangsan shi-wang ba fangzi kan

(34)   Zhangsan shi-wang kan <u>ching-chu</u> fangzi
                            clear
             "Zhangsan hopes to see the house clearly."

(35)   Zhangsan shi-wang ba fangzi kan ching-chu

In all the data above, it is clear that if there is a <u>ba</u> construction, there is always a grammatical alternate form, i.e. NP V NP. But if there is the form NP V NP, there may not always be a grammatical <u>ba</u> construction. So, one can argue that the <u>ba</u> is not the basic form in Chinese, and the <u>ba</u> is only transformationally inserted when the object is under certain conditions preposed to the front of the verb.

2.3.   As I said above, Tai's argument that the <u>ba</u> construction is the underlying form involves passives. Consider

(36)   Zhangsan dale Li-si
             "Zhangsan hit Li-si."

(37)   Zhangsan ba Li-si dale

(38)   Li-si <u>bei</u> Zhangsan dale
             passive marker
             "Li-si was hit by Zhangsan."

Tai claims that if (37) is the basic form, the passive rule merely has to change the SO order into OS, just like McCawley's (1970) analysis of English.[3]

Tai's argument may be based on two grounds: First, his analysis can simplify the grammar as the passive rule just takes one step. Second, the Chinese passive rule is like that of English. That means it can capture cross-linguistic generality.

However, the first point in Tai's argument can also be achieved even if Chinese has SVO word order. If (36) is the underlying form, it just needs one rule to prepose the object to the front of subject for sentence (38). This passive rule is equally as simple as Tai's.

Furthermore, it has been noticed (Teng 1975) that the passive in Chinese does not just move the object to the front. The derived subject "Li-si" in (38) is a "topic" and emphatic. And we find a similar situation with the _ba_ construction. The object in the _ba_ construction is somewhat emphatic. Consider

(39)   wo _male_ Zhangsan
         blame-asp.
         "I blamed Zhangsan."

(40)   wo ba _Zhangsan_ male

(41)   _Zhangsan_ bei wo male

In (40) and (41), _Zhangsan_ is a topic and emphasized while in (41), it is neutral. Thus, (39) (i.e. SVO) is more likely to

(3) McCawley (1970) claims that English is a VSO language in which the rule of passive permutes SO to OS. A later rule moves the NP following V to surface subject position.

be the basic and neutral form.

Chao (1968) notices that ba and bei have very much the same subcategorizational and selectional restrictions.[4]

(42)   wo shale Zhangsan
         kill-asp.
         "I killed Zhangsan."

(43)   wo ba Zhangsan shale

(44)   Zhangsan bei wo shale

(45)   *wo ba Zhangsan sha

(46)   *Zhangsan bei wo sha

(47)   wo fa   shau
         develop   fever
         "I have a fever."

(48)   *wo ba shau fa

(49)   *shau bei wo fa

So, it is fairly reasonable to assume that the ba and bei constructions are transformationally derived through a ba rule and the passive rule.

The second point of Tai's argument, that the Chinese passive rule is identical to that of English, can be established if and only if both Chinese and English have the SO construction. Berman (1974) convingcingly argues that McCawley's (1970) passive rule is highly suspect and that English as a VSO language is at no point better than SVO. If so, it is doubtful that Chinese and English have the same passive rule, and that the passive rule in Chinese can achieve cross-linguistic generality.

(4) The verbs which take ba and those which take bei are very much the same class except for certain verbs of perception, such as kan-jian "see", tin-jian "hear", jyuej "feel" and so on, which cannot take ba.

3. The ordering relation of relative clause and the head noun

3.1.   Tai's next argument for Chinese as an SOV language in-
volves the precedence relation between relative clause and
head noun. Following Bach (1965), Tai proposes that though
in surface structure a Chinese relative clause is always
ordered before the head noun, in underlying structure it
follows the head noun. It is proposed by Bach's universal
rule of relative clause preposing, which must obligatorily
apply <u>if the verb is at the end of the clause</u> (as it would
be, under Tai's SOV propsal).

(50)   Relative Clause Preposing:
         X   +   Noun   +   Rel   +   Y ------→ 1 + 3 + 2 + 4
         1   2   3   4

I would like to argue that there is no rule of relative clause
preposing applicable to Chinese, and that Tai's theory cannot
simplify the Chinese grammar as he claims.

3.2.   In Chinese, a relative clause is normally ordered before
the head noun.

(51)   wo <u>da</u> <u>de</u>   <u>neige</u> <u>ren</u> <u>shi</u> wo <u>didi</u>
              rel. marker   that man is   younger brother
         "The man that I hit is my younger brother."

(52)   *neige ren de wo da shi wo didi

(52) shows that no relative clause can be placed after the
head noun. But Tai notes that "when the head noun is inde-
finite and in a predication built on the existential verb
<u>you</u>, the relative clause can follow the head noun with <u>de</u>
marker omitted." (1973: 661)

(53)   wo <u>you</u> <u>yige</u> <u>xihuan</u> <u>meiguo</u>   <u>dianying</u> <u>de</u> <u>meimei</u>
                have   a   like American   movies   younger
                                                                           sister
            "I have a younger sister who likes American movies."

(54)   wo you yige meimei xihuan meiguo dianying

Tai says that given (53) and (54), one can have two alter-
natives. One is to assume "that the relative clause in Chi-
nese is ordered before the head noun in the underlying struc-
ture and is reordered after the head noun by a transformation
rule in the case of indefinite head noun in predication with
<u>you</u> as the main verb."(p. 661) The other is to assume that
the relative clause is ordered after the head noun and then
obligatorily preposed since Chinese has the verb at the end
of the clause. Now Tai assumes that (53) and (54) are der-
ived from the same underlying structure. I will argue that
they are not.

In English, there is a well-known distinction between
restrictive relative clause and nonrestrictive relative clause.
(55)   The Greeks who were philosophical liked wine.
(56)   The Greeks, who were philosophical, liked wine.
(55) and (56) have very similar surface structures. But they
are quite different in meaning and in intonation contour. It
has been proposed that sentences like (55) are derived by the
rule Relativization operating on an S which is embedded under
an NP, that is, on a complex NP. Nonrestrictive relative
clauses are also derived by the same rule of Relativization.
However, the clause that undergoes relativization is not a
complex NP but rather the second of two sentences conjoined

by _and_. Thus (56) is derived from a structure like

(57)   The Greeks liked wine and the Greeks were phil-
             osophical.

So, the restrictive relative clauses and the nonrestrictive relative clauses in English are argued to be derived from different underlying structures.

The same is in Chinese. In (53), the relative clause _xihuan meiguo dianying de_ "who likes American moves" modifies and restricts the head noun _meimei_ "younger sister" while in (54) the relative clause is somewhat independent. So the semantic difference between (53) and (54) is like that of restrictive and nonrestrictive relative clauses in English.

There is also a structural difference between (53) and (54). Consider

(58)   wo you yige meimei$_i$, ta$_i$ xihuan meiguo dianying
             "I have a younger sister, she likes American movies."

(59)   *wo you yige ta$_i$ xihuan meiguo dianying de meimei$_i$.

Note that in (58) there is an anaphoric pronoun _ta_ "she" showing up, but this is impossible in (59). This suggests that when the relative clause follows the head noun, then the anaphoric pronoun may be deleted or not. But this is not so in sentences like (53) where the relative clause precedes the head noun. There is one more structural difference between (53) and (54).

(60)   *wo you yige meimei de xihuan meiguo dianying

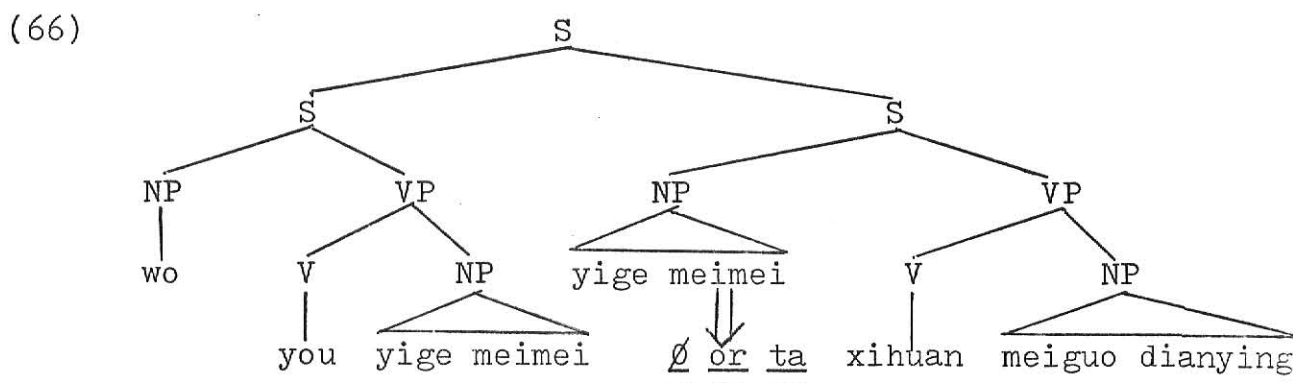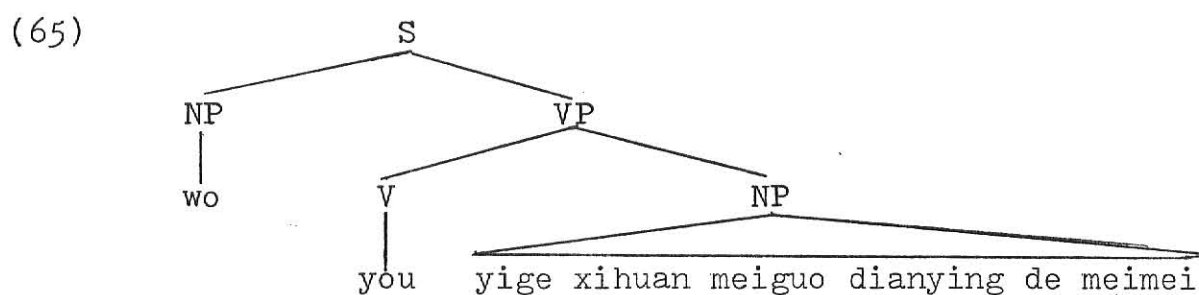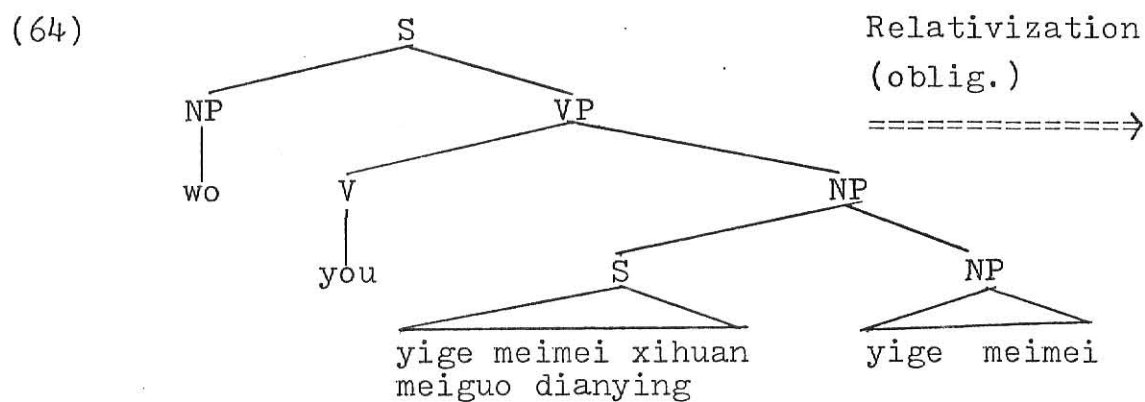(61)   *wo you yige xihuan meiguo dianying meimei

The ungrammatical (60) and (61) indicate that while there cannot be a relative marker de in sentences like (54), de cannot be deleted in sentences like (53).

One more piece of evidence to support (53) and (54) are derived from different underlying structures is the Immediate Dominance Condition proposed by Sanders and Tai (1972). The Immediate Dominance Condition is a restriction operating on coordinate identity deletion in languages of the Chinese types,[5] preventing the deletion of any constituent which is not immediately dominated by a conjunct sentence. This is why (53) is grammatical and (59) is not. But how about (58) where the subject ta is not deleted? We can assume that sentences like (54) and (58) are not derived from a complex NP, but, like nonrestrictive relative clauses in English, from the second of two sentences which are conjoined. As we can see, the second subject in the conjoined sentences may or may not be deleted even under identity:

(62)   Zhangsan dale Li-si, Zhangsan shale Wang
                                              kill-asp.
          "Zhangsan hit Li-si and Zhangsan killed Wang."

(63)   Zhangsan dale Li-si, shale Wang

So, it is reasonable to propose that the relative clause in (53) (=(65)) is derived from an S embedded under NP while the relative clause in (54) is derived from the second sentence of a conjoined structure like (66).

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(5) The Chinese-type languages here are Chinese, Thai,
     Lebanese and so on. See Sanders and Tai (1972, p. 165)

(64)

```
                         S                    Relativization
              NP                 VP           (oblig.)
              |           V              NP   ==============>
              wo          |         S           NP
                          you    yige meimei   yige  meimei
                                 xihuan meiguo
                                 dianying
```

(65)

```
                    S
          NP              VP
          |         V              NP
          wo        |
                    you    yige xihuan meiguo dianying de meimei
```

(66)

```
                              S
            S                            S
     NP          VP            NP                VP
     |        V      NP     yige meimei     V          NP
     wo       |                             |
              you  yige meimei   Ø or ta  xihuan   meiguo dianying
```

If it is right that sentences like (53) and (54) are derived

from different underlying structures, then there is no need

to have a relative postposing rule to derive (54) from (53),

nor a relative preposing rule to derive (53) from (54).

3.3.   Having assumed that a Chinese relative clause can be or-

dered before or after the head noun, Tai goes on to decide

which would be more preferable. And he notices that the phenomenon of pronominalization seems to favor the latter one, i.e. relative clause after the head noun.

In Chinese, it is observed that backward pronominaliztion is not allowed under any condition.

(67)   Zhangsan$_i$ dale wo <u>zihou</u>, ta$_i$ <u>jiu</u> <u>zaule</u>
                                  after   then go-asp.
         "After Zhangsan had hit me, then he left."

(68)   *ta$_i$ dale wo zihou, Zhangsan$_i$ jiu zaule
         "After he had hit me, then Zhangsan left."

(69)   <u>nukuo</u> Zhangsan$_i$ <u>lai</u>, wo jiu da ta$_i$
         if   come
         "If Zhangsan comes, I will hit him."

(70)   *nukuo ta$_i$ lai, wo jiu da Zhangsan$_i$
         "If he comes, I will hit Zhangsan."

(71)   *ta$_i$ dale Zhangsan <u>gen</u> Li-si$_i$ <u>male</u> wo
                            and   blame-asp.
         "He hit Zhangsan and Li-si blamed me."

It is reasonable to assume that the rule of pronominalization can only apply forward, not backward. Then Tai observes that if a noun phrase within the relative clause is co-referential to the head noun and cannot be deleted (because of the Immediate Dominance Condition), it must be pronominalized.

(72)   <u>zuctian</u> wo dale ta$_i$ de <u>neige</u> <u>ren</u>$_i$ shi wo <u>didi</u>
         yesterday   that man   younger
                                                 brother
         "The man that I hit yesterday is my younger brother."

(73)   wo <u>geile</u> ta$_i$ <u>yiben</u> <u>shu</u> de neige ren$_i$ shi wo didi
         give-asp. one   book
         "That man that I gave a book is my younger brother."

(74)   ta$_i$ <u>muquin hen</u> <u>gau</u> de neige <u>nanhaizi</u>$_i$ shi
         mother very tall   boy

         <u>meiguo ren</u>
         American
         "The boy whose mother is very tall is American."

Tai says that (72)-(74) show that the rule of pronominalization
has to apply backward in a relative clause, if the relative
clause precedes the head noun at the time the rule of pro-
nominalization applies. So he proposes that "the general-
ization can be held that Chinese pronominalization applies
only forward, if we assume that a Chinese relative clause is
ordered after the head noun in underlying structure and that
after the rule of pronominalization has applied, the relative
clause is then preposed to the front of the head noun."(p. 662)

How to get out of the problem raised by Tai if we want
to hold that Chinese is a SVO language and that pronominaliztion
can only apply forward, I can not work out yet. But, I would
like to point out that sentences like (72), (73) and (74)
with anaphoric pronouns within the relative clauses are un-
grammatical for me and for many native speakers that I have
asked. Sentences (72), (73) and (74) are better if the ana-
phoric pronouns are deleted.

(75) zunctian wo dale de neige ren shi wo didi
    "The man that I hit yesterday is my younger brother."

(76) wo geile yiben shu de neige ren shi wo didi
    "The man that I gave a book is my younger brother."

(77) muquin hen gau de neige nanhaizi shi meiguo ren
    "The boy whose mother is very tall is American."

There can not be pronouns in relative clauses which are co-
referential with the head nouns (in my dialect). Note also
that sentences (75) and (76) are much more preferred if the
relative clauses are in passive voice.

(78)   zuctian bei wo dale de neige ren shi wo didi
         "The boy who was hit by me yesterday is my younger
         brother."

(79)   bei wo geile yibun shu de neige ren shi wo didi
         "The man who was given a book by me is my younger
         brother."

Then sentences (75) and (76) seem to violate the Immediate

Dominance Condition since the objects of the verbs are deleted.

But consider

(80)   neige ren, wo dale
         "The man, I hit."

(81)   neige ren bei wo dale
         "The man was hit by me."

As was pointed out by Sanders and Tai (1972), there is no top-

icalization in Chinese. What seems to be topicalization is

indeed passive. So (80) and (81) are nearly identical in

derivation. Similarly, we can assume that the sentences

(82)   wo dale de neige ren shi wo didi
   "The man that I hit is my younger brother."

(83)   bei wo dale de neige ren shi wo didi

are actually the same. In (82), the relative clause undergoes

the passive rule without the passive marker bei showing up,

just like (80). So the object neige ren would become the

derived subject and then be obligatorily deleted. The same

holds for (76) as it is true that sentences like (81) are

more desirable and commoner than (80).

If my analysis is right, the phenomenon of pronominalization

doesn't support the claim that relative clauses follow the

head nouns in underlying structure. At least, for me and many

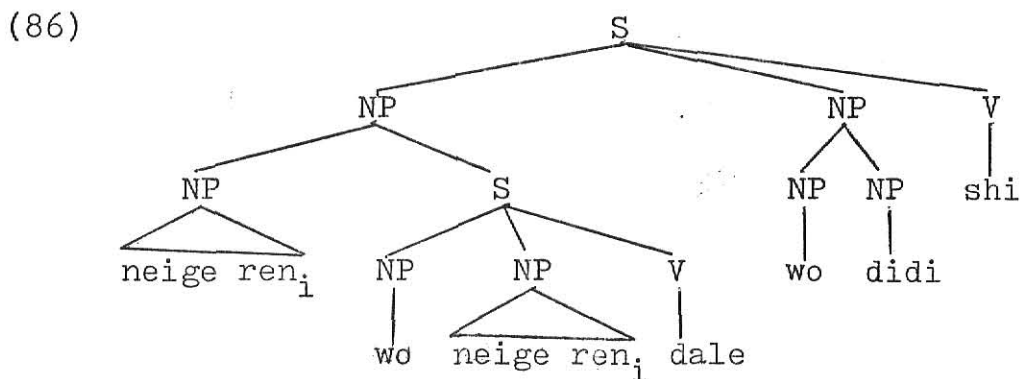native Chinese speakers, there cannot be pronouns in relative

clauses which are co-referential to the head nouns.

Furthermore, assuming that Chinese has underlying SOV word order, Tai would like the deep structure of transitive sentences represented as:

(84)

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            S
          / | \
        NP  NP  V
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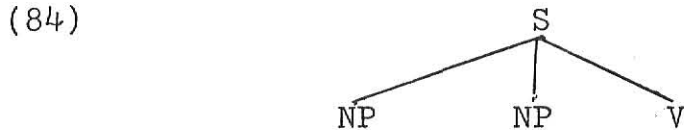
The same analysis is proposed by Schwartz (1972). Schwartz proposes that only the languages which have VO construction (i.e. SVO, VOS) have the VP constituent. This means that there is no a VP constituent in the Chinese grammar. So sentences like (85) (which Tai regards as grammatical) would have the deep structure represented as (91).

(85)   wo dale ta_i de neige ren_i shi wo didi

(86)

```
                            S
                  /                   \
                NP                    NP    V
              /    \                 /  \    |
            NP      S              NP   NP  shi
             |     / | \            |    |
       neige ren_i NP NP  V        wo   didi
                    |   |   |
                   wo neige ren_i dale

                   ta
```

But certainly (85) violates Tai's Immediate Dominance Condition. In (86), the anaphoric pronoun <u>ta</u> is immediately dominated by the embedded S, so according to the Immediate Dominance Condition, <u>ta</u> has to be deleted. Yet Tai accepts accepts

(85).[6] So it is doubtful if (85) has the deep structure like (86).

Following Tai and also Schwartz (1972), it would be better to assume that Chinese is an SVO language and that (85) has the deep structure represented as (87).

(87)
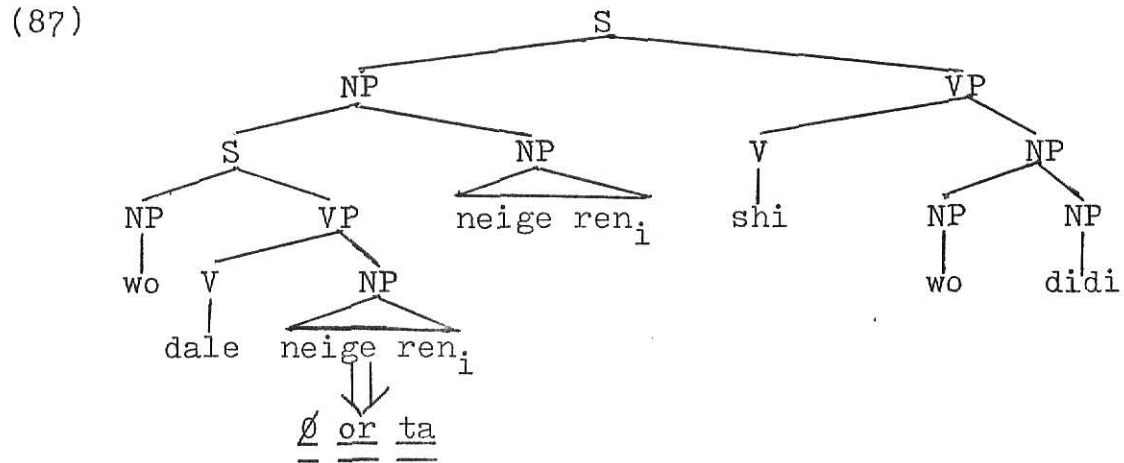
(87) can explain why there is _ta_ or not showing up in the surface structure, but not (86). So it is reasonable to reject Chinese as an SOV language in this respect.

3.4.   Following Bach (1965), Tai proposes that in every natural language, a deep structure relative clause follows the head noun, and if a language has the verb at the end of the clause, then a universal relative clause preposing rule must obligatorily apply. In Chinese, as relative clauses are ordered before the head nouns, Tai claims that Chinese has verb at the clause final position. Thus Chinese is a SOV language.

_____

[6] Assume Chinese has a deep structure like (84) and also the Immediate Dominance Condition, there are a lot of other phenomena which cannot be explained, such as why there is no gapping, topicalization and so on. But if we assume that the Immediate Dominance Condition is wrong, then there is no way to explain why Chinese allows anaphoric pronouns in the object position but not in the subject position in the relative clause of (85).

Tai's argument involves the universality of the base structure and also the markedness as Bach (1974) points out that the hypothesis that "the basic structures for relative clauses are identical in all languages, a hypothesis that would follow from the view that all underlying structure are identical"(p. 276) Very little is known about the universality of the base structure and the markedness yet in present studies of linguistics. Bach even points out that "the idea the base rules of every language are literally the same (the Universal Base Hypothesis)...cannot at present be disconfirmed (hence corroborated) by any empirical evidence of the sort usually considered by linguists. This is so because it is possible to construct a universal base that will form the basis for a transformational grammar meeting any of the usual tests for descriptive adequacy"(1974: 263). So he goes further to say that the hypothesis that the base rules for all languages are identical is not an empirical hypthesis.

Sanders (1975) remarks that "statistical or probabilitistic laws...cannot be used, though, to predict or explain anything about all members of a set, or about any one of its particular members....Statements simply asserting that P is more probable than Q, or more likely, or more natural, or more unmarked, thus have no possible predictive or explanatory power at all. They cannot be used to account for either the existence of P rather than Q in any particular

case, or the numerical preponderance of P over Q in any ob-
served class of cases....Statements of likelihood, tendency,
or numerically unspecified relative markedness or naturalness
can be used at most to roughly describe certain observed pro-
perty preponderance relations in certain observed sets of
languages. They are too vague and unnecessarily elaborate
and abstract to be really useful even as statements of mere
description. They have no possible predictive or explanatory
uses at all." (p.p. 392-394)

Thus it is really hard to justify the hypothesis that
relative clauses are ordered after head nouns in all natural
languages.

Furthermore, Tai's argument is based upon a very weak
ground. Tai's theory is derived from the Universal Base
Hypothesis. However, he would like to maintain that there
are two word orders in all natural languages, as he says that
"as far as the underlying word order is concerned, languages
can only differ in that either they have verbs in the final
position or in the initial position" (1973: 669). Now Tai
assumes the Universal Base Hypothesis on the one hand and also
a wealer hypothesis (i.e. two possible word orders) on the
other hand. Thus, Tai's ground is somewhat confusing.

Tai's argument is based upon the assumption that there
are only two word orders. But it is not yet certain how many
possible word order there are in all natural languages. If
there are three or more possible word orders, Tai's argument
may be collapsed. Thus, his argument is on a very weak ground.

4   Prepositions vs postposition

4.1.   Examining word order in Chinese and the grammatical
features listed in Greenberg (1966), Tai finds that Chinese
has all of the properties of an SOV language except that in
most cases it has apparent prepositions rather than post-
positions.

(88)   ta gen Zhangsan da-chia-le
             with   fight-asp.
          "He fought with Zhangsan."
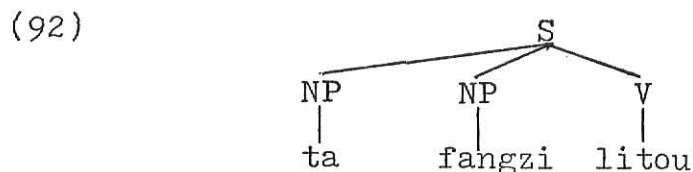
(89)   ta yong dauzi sha-shi Zhangsan
             use   knife kill-die
          "He killed Zhangsan with a knife."

However, Tai claims that Chinese seems to have postpositions
rather than prepositions in locative phrase.[7] Consider

(90)   ta zai   fangzi litou
             locative house inside
          "He is inside the house."

(91)   ta zai fangzi litou ku
                               cry
          "He is crying inside the house."

Tai claims that zai in (90) and (91) is clearly only a locative
marker, and that the selection of specific locations is de-
termined by postposition, i.e. litou "inside". He argues
that the peculiarity of Chinese locative construction can
be excellently explained within the proposed framework of
Chinese as an SOV language with a rule of NP-V inversion.
The deep structure of (90) can be represented as:

(92)

```
                    S
             _____/|_____
            /       |       \
           NP      NP        V
           |        |        |
           ta     fangzi   litou
```
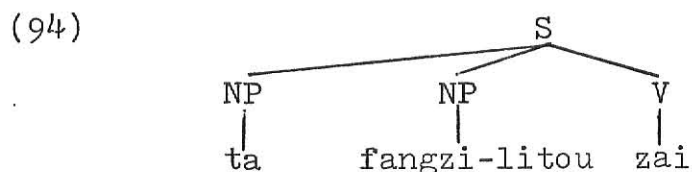
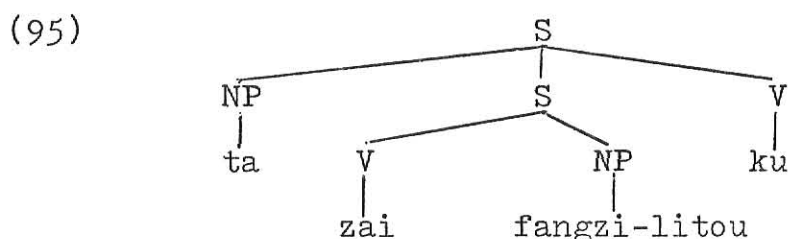(7) In Chinese, postpositions are localizers only. See Chao (1968).

Then following Sanders' (1972) approach of deriving prepositions
and postpositions, (92) will first be converted to (93) by
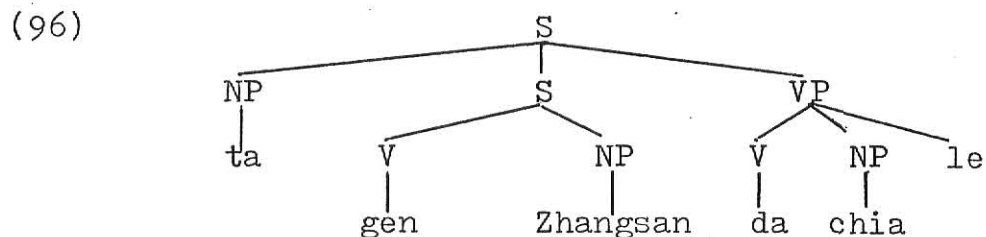the rule of Copying

(93)

```
                        S
          _____/ | _____
        NP             NP              V
        |              |               |
        ta       fangzi-litou        litou
```

A deletion rule, which in general applies to delete the source,
will in this case delete all but the grammatical feature
$\begin{bmatrix} + \text{location} \end{bmatrix}$ of the source, which is later lexicalized as
zai.

(94)

```
                        S
          _____/ | _____
        NP             NP              V
        |              |               |
        ta       fangzi-litou        zai
```

Then, the NP-V inversion rule will obligatorily apply to yield
sentence (90). Similarly, the surface structure of (91) can
be represented as

(95)

```
                         S
          _____/|_____
        NP               S               V
        |          _____/ \_____         |
        ta        V           NP         ku
                  |           |
                 zai     fangzi-litou
```

Tai goes further to claim that sentences (88) and (89) can
be represented as (96) and (97) respectively.

(96)

```
                         S
          _____/|_____
        NP               S              VP
        |          _____/ \_____     ___/|\___
        ta        V           NP    V   NP   le
                  |           |     |   |
                 gen      Zhangsan  da  chia
```

(97)

```
                              S
              ┌───────────────┼───────────────┐
             NP              S               VP
              │        ┌──────┴──────┐    ┌────┴────┐
             ta        V            NP    V        NP
              │         │            │     │         │
             ta       yong        dauzi sha-shi  Zhangsan
```
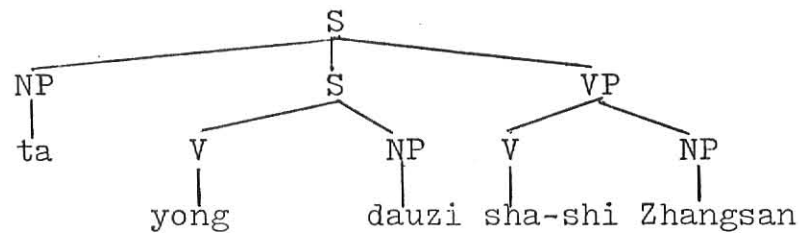
Note that <u>zai</u>, <u>litou</u>, <u>gen</u>, <u>yong</u> (prepositions and post-positions in general) are represented as verbs in Tai's analysis. Here I am not concerned whether prepositions[8] are real verbs or not. They are historically derived from verbs, and are always morphologically and phonologically identical to verbs, and are used as verbs. But it is obvious there are differences between verbs and prepositions syntactically. (See below)[9] And I will argue that postpositions like <u>litou</u> cannot be verbs.

4.2.   In his analysis, Tai treats prepositions as verbs, and similarly, prepositional phrases as verbal phrases. The status of prepositions in Chinese is uncertain and disputed since there are some prepositions which can be used as main verbs.

(98)   ta zai <u>chia</u> <u>ma</u>
     home interrogative marker
 "Is he at home?"

(99)   ta zai chia <u>kan</u> <u>su</u>
      see book
 "He is reading books at home."

(100)   <u>bu</u> <u>yau</u> <u>yong dau-zi</u>
 not have to use knife
 "Don't use a knife."

(101)   bu yau yong dau-zi <u>sha</u> <u>ren</u>
         kill man
 "Don't kill people with a knife."

---

(8) Also sometimes called "co-verbs" in Chinese.
(9) See Hwang (1974: 219-224)

(102)   ta <u>dau</u>   meiguo <u>le</u>
               arrive America asp.
           "He has arrived in America."

(103)   ta dau meiguo <u>chyu</u> le
                                go
           "He has gone to America."

Note that <u>zai</u>, <u>yong</u>, <u>dau</u> are used as main verbs in (98),
(100), and (102). But the phrases <u>zai chia</u>, <u>yong dau-zi</u>,
<u>dau</u> <u>meiguo</u> in (99), (101) and (103) only function as a type
of modifier to the main verbs, like adverbial phrases in
English. So <u>zai</u>, <u>yong</u>, and <u>dau</u> in sentences like (99), (101)
and (103) with VP following them do not, in fact, function
as main verbs.

    Notice that some prepositions may take an object or not
when they are used as verbs.

(104)   ta <u>bu</u> zai <u>chia</u>
               not   home
           "He is not at home."

(105)   ta bu zai
           "He is not here."

(106)   bu yau <u>yong</u> <u>dau-zi</u>
                   use   knife
           "Don't use a knife."

(107)   bu yau yong
           "Don't use (it)."

(108)   ta <u>dau</u> le
               arrive
           "He has arrived."

But in sentences with prepositions being followed by V, then
the first verbs (i.e. prepositions) must be transitive.⁽⁶⁾
_____
⁽¹⁰⁾ The only exception I can find is <u>bei</u>. But it is quite
         clear that there is noun phrase following <u>bei</u> but then
         deleted. See Chao (1968).

(109)   ta zai fangzi-litou ku
         "He is crying inside the room."

(110)   *ta zai ku[11]

(111)   ta dau <u>ni</u> <u>chia</u> <u>chyu</u> le
                 you home go
         "He has gone to your home."

(112)   *ta dau chyu le

(113)   ni yong dau-zi <u>sha</u> <u>zi</u>   <u>ba</u>
                        kill chicken particle
         "You kill the chicken with the knife."

(114)   *ni yong sha zi ba

While some prepositions like <u>zai</u>, <u>dau</u>, and <u>yong</u> may take objects

or not when they are used as main verbs, they must take objects

if there are other verbs in the sentences.

    All true verbs can take the perfective marker <u>le</u> after

them.

(115)   ta <u>zi-le</u> <u>fan</u>
            eat-asp rice
         "He has eaten the rice."

(116)   ta zai-le
         "He is here."

(117)   ta yong-le dau-zi
         "He has used the knife."

(118)   ta dau-le meiguo
         "He has arrived in America."

But this is not the case for prepositions. No prepositions

can take the perfective marker <u>le</u>.

(119)   *ta zai-le chia kan su
         "He has read books at home."

(120)   *ta yong-le dau-zi sha zi
         "He used a knife to kill the chicken."

---

[11](110) is grammatical as "he is crying," where <u>zai</u> is not
   a locative marker but a progressive marker.

(121)   *ta dau-le meiguo chyu le
"He has gone to American."

It has also been observed that not all prepositions can be used as verbs. Some prepositional phrases have to be followed by a main verb.

(122)   ta <u>yuen</u> <u>he</u>   <u>chyu</u>-le
          along river go
"He has gone along the river."

(123)   *ta yuen he

(124)   ta <u>shiang nan</u> chyu-le
          toward South
"He has gone toward the South."

(125)   *ta shiang nan

So there are some differences between verbs and prepositions syntactically. How to differentiate them, I am not very sure yet.[12] Further investigation in this respect is necessary in the grammar of Chinese.

4.3.   Postpositions are historically derived from nouns. They are always morphologically and phonologically identical to nouns, and sometimes even used as nouns. The distinction between nouns and postpositions is not always clear.

(126)   Zhangsan <u>gen</u> Li-si zai <u>fangzi-litou</u> <u>da-chia</u> le
              and   room-inside fight
"Zhangsan and Li-si are fighting inside the room."

(127)   Zhangsan gen Li-si zai <u>litou</u> da-chia le
                          inside
"Zhangsan and Li-si are fighting inside."

(128)   fangzi-<u>waiman</u> <u>hen</u> kwang
              outside very bright
"It is very bright outside the room."

---

(12)   It may be proposed that in the lexicon, words like <u>zai</u>, <u>dau</u>, <u>yong</u> and so on are indeed two differnt lexical items, one categorized as verbs, the other as prepositions. And the lexical entries would indicate their syntactic and semantic functions and structures.

(129)   ta <u>chyu-le</u> <u>waiwan</u>
          go-asp. outside

In Tai's analysis, postpositions "are derived from underlying predicates by copying the underlying predicate to the noun phrase and deleting the original predicate"(1973: 664). Thus under his SOV hypothesis, Chinese would get

(130)   NP V -------→ NP-v V

And then a rule of NP-V inversion would yield (130) to (131).

(131)   NP-v V ------→ V NP-v

He illustrates his theory in (92), (93), (94) and (90).

However, Tai doesn't specify his theory and arguments. His ground is too vague. I don't know if the copying rule in his theory is optional or obligatory. It doesn't seem neither. If it is obligatory, then there would be many post-positions other than localizers. If it is optioal, how can we explain the ungrammaticality of sentences like

(132)   *?ta zai fangzi[13]
          "He is in the house."

In order to get out of this problem, one may then propose that the copying rule is only applicable to locative phrases. Then we would expect that the other examples would behave simi-arly. But this is not so. Consider a sentence like
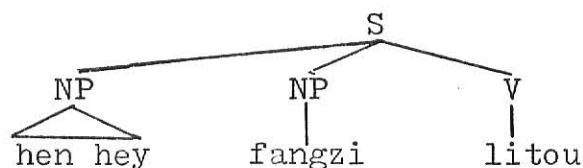
(133)   fangzi litou hen <u>hey</u>
                           dark
          "The inside of the room is very dark."

---

(13) If we accept (132), then Tai's note that <u>zai</u> is just
      a locative marker and that the selection of specific
      locations is determined by postpositions is false.

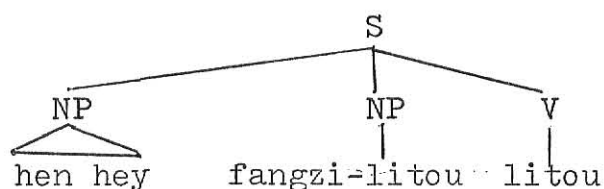According to Tai's theory, prepositions are higher verbs.
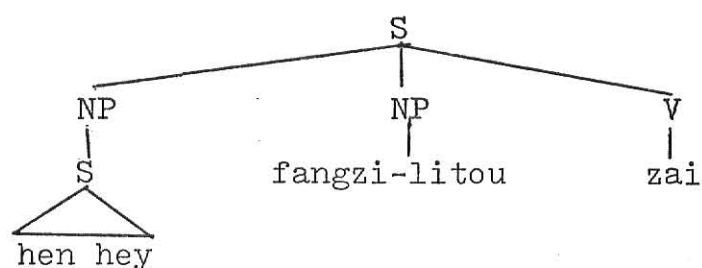Thus (133) would have the deep structure like

(134)

```
                          S
          _____|_____
         NP              NP               V
        /__\             |                |
      hen hey          fangzi           litou
```

Then first it will be converted to (135) by the rule of Copying.

(135)

```
                          S
          _____|_____
         NP              NP               V
        /__\             |                |
      hen hey      fangzi-litou         litou
```

Then like (93), the deletion rule will in this case delete
all but the grammatical feature [+ location] of the source,
which is later lexicalized as zai.

(136)

```
                          S
          _____|_____
         NP              NP               V
         |               |                |
         S          fangzi-litou         zai
        /__\
      hen hey
```
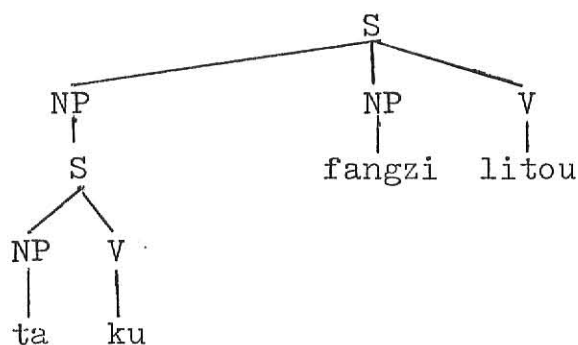
NP-V inversion applies. The result is

(137)   *hen hey zai fangzi litou

(137) is totally ungrammatical in Chinese. Notice that hen
hey precedes zai fangzi litou. If we follow Tai's way of
derivation, we would always get prepositional phrases after
the main verbs. Consider

(138)   ta zai fangzi-litou ku
                              cry
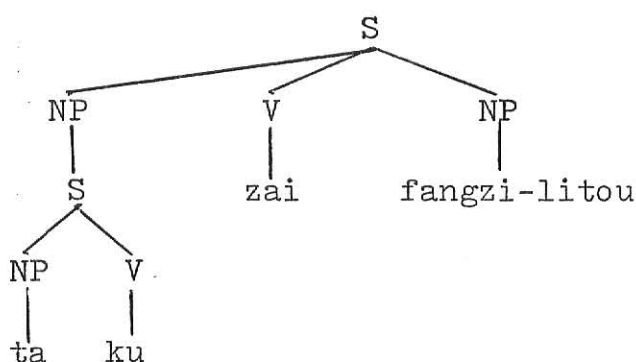   "He is crying inside the house."

The deep structure of (138) would be like:

(139)

```
                              S
              _____|_____
            NP              NP          V
            |               |           |
            S            fangzi       litou
          __|__
        NP    V
        |     |
        ta    ku
```

Then the rule of copying, deletion and NP-V inversion apply
and get

(140)

```
                              S
              _____|_____
            NP          V          NP
            |           |          |
            S          zai     fangzi-litou
          __|__
        NP    V
        |     |
        ta    ku
```

Thus there is no way to yield (139) to (138). Then one may
propose some rules to prepose prepositonal phrases to solve
the problem.

Going back to (137), however, we still have problem.
After prepositional phrase preposing applying to (137), we
would get

(141)   *zai fangzi litou hen hey

(141) is still ungrammatical because of the presence of zai.
Here, zai cannot be deleted to yield (133); this is shown
by (90)[14]. So Tai's derivation is highly suspect.

_____

(14) In (90), if zai is deleted, we would get
          *ta fangzi litou
      which is ungrammatical.

4.4.   In his "Remarks on Nominalization, Chomsky argues again-
st the transformational hypothesis and says: (1972: 35)

> ....Suppose it were true that just verbs and ad-
> jectives cross-classify with respect to the fea-
> ture active-stative. It would not follow that
> verbs and adjectives belong to a single category,
> predicator, with the feature $\boxed{\pm\ \text{adjectival}}$ dis-
> tinguishing verbs and adjectives. From the fact
> that a feature $\boxed{\pm\ F}$ is distinctive in the categoies
> X, Y, it does not follow that there is a feature
> G such that X= $\boxed{+G}$ and Y= $\boxed{-G}$, and a category
> Z= $\boxed{\pm G}$.

Then similarly, we may assume that in Chinese, certain syn-
tactic and semantic similarities can not establish that pre-
positions and verbs belong to the same category.

If we assume that they are, because they share some simi-
larities, then let's turn to postpositions. As stated above,
the Chinese postpositions are historically derived from nouns,
they are always morphologically and phonologically identical
to nouns, and some of them can be used as nouns.

(142)   fangzi-litou <u>hen</u> <u>hey</u>
                          very dark
           "It is very dark inside the house."

(143)   litou hen hey
           "It is very dark inside."

In (143), <u>litou</u> is used as noun. If prepositions are verbs
because they are morphologically and phonologically identical
to verbs and (some of them) can be used as verbs, then post-
positions, under the same reasoning, will naturally belong

to the category noun.

If postpositions are nouns, then Tai's proposal of copy-
ing cannot work. And in Tai's theory, there is no way to get
a structure like NP-np V. So Tai's theory is highly doubtful.
If they cannot, at least postpositions, be treated as verbs,
then one of Tai's major arguments for Chinese as SOV hypothesis
can be rejected.

5. Conclusion

I have already briefly argued that Chinese is not an
SOV language. However, it has been noticed that Chinese has
many grammatical features which are shared by most SOV lan-
guages, like:

(144)   a. relative clause before head noun

         b. adjective before noun

         c. genitive before the governing noun

         d. adverbial before the main verb

         e. adverb before adjective

and so on. So Tai says if Chinese is a SOV language, then
"it is capable of providing of great value for...similari-
ties in word order between Chinese and Japanes." (p. 659)

However, Kuno (1974), in studying the relative clauses
and conjunctions, observes the dilemma of SVO languages. He
notes that SVO languages "are like SOV language in that the
subject appears to the left of the verb, but they are like
VSO languages in that the object appears to the right of the
verb. Therefore, if they use clause-initial conjunctions,
they win on the object position, but lose on the subject
postion; similarly, if they use clause-final conjunction,

they win on the subject position, but lose on the object position." (p.p. 128-9)

The dilemma of SVO languages, observed by Kuno, can be extended to other respects of word order, not just in relative clauses and conjunctions. No matter which tendency they take, they have to share the grammatical features which most VSO and SOV languages have. We can assume that Chinese tends to the verb-final position, while some SVO languages like English, French, tend to verb-initial position. This can explain why Chinese has so many characteristics of SOV languages and while some SVO languages like Englich and French have so many characteristics of VSO languages. So a surface SVO language sharing some grammatical features of most SOV languages have does not necessarily mean that that language is a underlying SOV language.

For instance, we can see that English, which has been generally regarded as a SVO language, even a VSO language, also has some grammatical features that most SOV languages share, for example, adjective before noun, genitive (with NP's NP construction) before noun, adverb before adjcective. But it cannot establish that English is a SOV language. So is the case of Chinese.

The deeper structure of Chinese grammar has been little studied and known and it should be more fully investigated. Tai's work is no doubt a very important pioneer in this respect.

III. Word Order Change: SVO------> SOV

1. Introduction

It has been suggested in recent literature that incon-
sistency of word order is the result of word order change
in the language. In the surface structure of Chinese,
there are both SOV and SVO word orders.

(145)   wo dale Zhangsan   (SVO)
          "I hit Zhangsan."

(146)   wo <u>fang su</u>   zai <u>zo-shang</u>   (SVO)
              put book   table-above
          "I put the book on the table."

(147)   wo ba Zhangsan dale   (SOV)

(148)   Zhangsan bei wo dale   (SOV)

(149)   wo ba su fang zai zo-shang   (SOV)

The inconsistency of Chinese surface word order leads
to the general assumption that Chinese has been undergoing
word order change from SVO (of Archaic Chinese) toward SOV,
a change which is not fully matured.

In the following, I will discuss the word order shift
of Chinese, its direction and also some hypotheses made re-
cently, especially those by Li (1975) and Li and Thompson
(1974, 1975).

2. Evidence for SVO-----> SOV

2.1. It has been observed that Chinese word order has been under-
going a shift from SVO to SOV. However, this shift has been
a very slow process that presumably began in the Early Han
dynasty, more than two millennia ago. The process is so

gradual that it remains incomplete in Modern Chinese. The
observation of word order change is mainly due to the shift
of the prepositional phrases and the ba and bei constructions.

In Modern Chinese, prepositional phrases generally pre-
cede verbs.

(150)   wo zai zung-li   ju
               city-inside live
          "I live in the city."

(151)   wo zong chia-li lai de
             from home   come particle
          "I come from home."

(152)   zie tui wo hen fang-bien
          this to   convenient
          "This is very convenient for me."

But there are still some prepositional phrases after verbs,
namely, locative and dative. However, as Li and Thompson
(1974) oberve, they can occur only under special constraints,
such as monosyllablicity and lack of complex morphological
structure of the verb.(15)

(153)   Zhangsan zai chuangshang shui
                     bed-above   sleep
          "Zhangsan sleeps on the bed."

(154)   Zhangsan shui zai chuangshang

---

(15) There are still certain verbs which take only post-
      verbal locative prepositional phrases.
      (a) ta ba su fang zai zo-shang
             book put   table-above
      "He put the book on the table."
      (b) *ta ba su zai zo-shang fang
      (c) ta ba wo sao zai fangzi-litou
                   lock
      "He locked me in the room."
      (d) *ta ba wo zai fangzi-litou sao
      However, these verbs that take post-verbal prepositional
      phrases are rare and limited.

(155)   Zhangsan zai chuangshang <u>shui-jiau</u>
                                        sleep-sleep
         "Zhangsan sleeps on the bed."

(156)   *Zhangsan shui-jiau zai chuangshang

So generally, Modern Chinese has the structure S + PP + V

(where S is a subject).

In Archaic Chinese and Ancient Chinese, prepositional

phrases are generally ordered after verbs.

(157)   <u>i   chi min   yu He-tong</u>
         move its people to He-tong
         "move its people to He-tong."

(158)   <u>chi   yu Chi</u>
         set out   in Chi
         "set out in Chi."

(159)   <u>kung kang yu Nan-yan</u>
         farm   Nanpyan
         "farm at Nan-yan."

(160)   <u>ku   shung   yu   zau nu</u>
         visit servant (courtesy) hut
         "visit me in the hut."

Thus prepositional phrases have shifted from largely post-

verbal position to largely pre-verbal position.

(161)   Archaic Chinese =======⟹ Modern Chinese
         S + V + PP   S + PP + V

From V + PP to PP + V, the verbs have stepped toward

final position.

As pre-verbal prepositional phrases become predominant,

it can be imagined that post-verbal prepositional phrases

may vanish in the near future.

2.2.   Another important piece of evidence for Chinese shift-
ing from SVO to SOV is the proliferation of the ba cons-
truction. It has been noticed (Li and Thompson (1974)) that
the emergence of the ba construction is a process that began
in the late Tang dynasty (9th century A.D.). Prior to the
Tang dynasty, ba was a verb meaning "to take hold of". Like
most of the present day prepositions, ba occurred more often
in serial verb constructions than in single sentences.

(162)   ba   jil wen zin tien
          take hold of wine ask blue sky
          "(I) take hold of the wine and ask the blue sky."

(163)   yin   shyu ba   jien   kan
          should   need take hold of sword   see
          "(I) should take hold of the sword to comtemplate
          it."

In Modern Chinese, ba has become a particle and functions as
an object marker.

(164)   wo ba Zhangsan dale
          "I hit Zhangsan."

(165)   wo dale Zhangsan

Li and Thompson (1974) claim that "it is important to note
that the ba-construction has become the preferred form in
Modern Chinese when the verb is polysyllablic...if the verb
is morphologically complex or modified, the ba-construction
is usually preferred and often the only acceptable form"
(p. 203) and Li (1975) further says "If the verb is modified
by a phrase such as yidun "once", the SOV sentence is often
the only acceptable form"(p. 885).

(166)   tamen ba Zhangsan cong tau dau wei de
          they   from head to tail

          jiantau   le lian xiaushi
          scrutinized two hour
          "They scrutinized Zhangsan from head to tail
          for two hours."

(167)   *tamen cong tau dau wei de jiantau le Zhangsan
          lian xiaushi

(168)   Zhangsan ba Li-si dale yidun
                            hit once
          "Zhangsan hit Li-si once."

(169)   *Zhangsan dale yidun Li-si

Li and Thompson claim that (167) and (169) are ungrammatical.

But to me, (167) is grammatical and acceptable. In (169),

if the object Li-si is ordered after dale and before yidun,

then it also is fully grammatical.

(170)   Zhangsan dale Li-si yidun

For me, Li and Thompson's examples cannot justify their claim.

Furthermore, in Chapter II, I have already shown that the ba

construction is very limited and constrained. I am not arguing

that the ba-construction is not popularly used today, but it

does not seem to be true that, in Li and Thompson's words,

"the SOV construction is always preferred, and in some case

is obligatory."

In Archaic and Ancient Chinese, objects preceding verbs

were not allowed.[16]   However, in Modern Chinese, objects are

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(16) The only exception is that in Archaic Chinese pronominal
      objects were obligatorily before verbs in interrogative
      structures, and optionally preceded verbs in declarative
      structures.

allowed to precede verbs with <u>ba</u> as a marker under some
conditions. This suggests that Chinese is undergoing a
shift from VO to OV, and present day Chinese is an inter-
mediate stage in the total shift.

2.3.   More evidence to support the word order shift in Chinese
is based on the <u>bei</u> construction, the passive. In Archaic
Chinese, the passive construction had the structure

(171) NP_1 V   Preposition NP_2 (SVO)

where $\underline{NP}_1$ is the derived subject, $\underline{NP}_2$ the derived object,
and <u>preposition</u> the passive marker.

(172)   <u>lau</u>   <u>li</u>   <u>ze</u>   <u>zi</u>   <u>yu</u>   <u>ren</u>
          apply   strength people govern pas. man
          "Those who do manual labor are governed by others."

In Modern Chinese, $\underline{NP}_2$ is ordered before the verb.

(173)   Zhangsan bei wo <u>male</u>   <u>yidun</u>
                          blame-asp. once
          "Zhangsan was blamed by me once."

(174)   Zhangsan bei wo <u>zin</u>   <u>chyu</u> <u>zi</u>   <u>fan</u>
                          invite to   eat rice
          "Zhangsan was invited to dinner by me."

So in Modern Chinese, the passive construction is

(175) NP_1 bei NP_2 V

It is obvious that in the passive construction, the SVO word
order has given up and shifted into SOV word order.

     One might wonder whether there were any intermediate
steps, and if so what they were. The emergence of the <u>bei</u>
construction began relatively early, in the early Han dynasty

(2rd-1st century B.C.), when the bei began to function as
a particle without being followed by a noun phrase.[17]

(176)   zong er bei bang
             loyal yet   villify
             "loyal but yet was villified."

In spite of the missing noun phrase after bei, it is quite
obvious that the SOV word order has already taken in the
passive structure in the Han dynasty as bei preceded the verb.

2.4.   Li and Thompson (1974) note a general shift of Verb-
Object constructions to Preposition-Object-Verb constructions
and the co-existence of both in Modern Chinese.

(177)   chu tong men   (SVO)
             out east door
             "come out from the east door."

(178)   cong tong men chu-lai
             from   come-come   (SOV)
             "come out from the east door."

(179)   ni chyu nar   (SVO)
             you go   where
             "Where are you going?"

(180)   ni dau nar chyu   (SOV)
                to
             "Where are you going?"

As a matter of fact, under some cases, the prepositions can
be deleted.

(181)   ni nar chyu   (SOV)
             "Where are you going?"

Note that the above evidence in support of word order
shift involves the ordering relation between prepositional

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(17) In Archaic Chinese, bei functioned as a verb and
        meant "receive".

phrases and verbs.[18] In Modern Chinese, prepositional
phrases are generally pre-verbal. Li and Thompson (1974)
note the historical derivation of the prepositions in
Modern Chinese and also propose a reasonable and possible
routine for word order change:

> ...one does not expect speakers of a language
> to move the verb of a simple sentence from one
> position to another as a process of historical
> word order change regardless of what has hap-
> pened to the morphology of the language. It
> is much more reasonable to imagine, as the facts
> bear out, that simple sentences of a new word
> order arise from complex sentences as a result
> of morphological change or lexical change. Such
> sentences with the new word order co-exist
> with sentences of the old word order and even-
> tually replace the latter. Thus, in the case
> of Ancient Chinese, the simple sentences of SVO
> order remained as SVO, while certain complex
> sentences became simple sentences with SOV word
> order:
>
> S V O V ------> S case   O V
> marker
> particle
>
> The sentences with the new word order then grad-

(18) In Chinese, prepositional phrases are always adverbial
     phrases as types of modifier to the verbs. However, about
     ba and bei, though they share the same characteristics as
     the other prepositions (i.e. position, historical deri-
     vation, and so on), they are followed by noun phrases which
     are surface objects and are not modifiers to the verbs.
     So, it is doubtful if ba and bei should be treated as
     prepositions.

ually replace the existing SVO types, pushing the language from SVO to SOV.

(1974: 209-210)

Certain verbs in Archaic and Ancient Chinese, especially the serial verbs, have become prepositions in Modern Chinese. Many of these, like ba, bei, cong, have lost all characteristics of verbs, but others, like zai, yong, dau, gei still retain some characteristics of verbs and can be used as verbs under some circumstances. This confusion is presumably due to the fact that some are faster than others in the process of shift. Why this should be so is unknown. It is reasonable to imagine that those prepositions which still have some characteristics of verbs will lose them sooner or later.

2.5.   Li (1975) proposes that the stages of the word order shift in Chinese may be

(182)   a.   S + V + O + PP

             b.   S + O + V + PP

             c.   S + PP + O + V

Li says that sentences with the structure (182c) are already common in Mandarin, as in

(183)   Zhangsan zai wuzi-li ba Li-si ma
                          house-in   blame
             "Zhangsan blamed Li-si in the house."

So he claims that "obviously, the development of SOV word order has gone beyond the intermediate structure 11 b [my (182 b)] , which is now limited to those verbs whose semantic content is conducive to the further specification of a physical

direction, e.g. (throw, toss, drop, put, place, push)."
(1975: 876)

I will argue that Li's description of the stages of
Chinese word order shift is incorrect. The stages, I sug-
gest, should be like

(184)   a.   S + V + O + PP
          b.   S + PP + V + O
          c.   S + PP + O + V

The difference between my proposal and Li's lies in the in-
termediate stage, where I suggest that it is prepositional
phrases and not objects which have appeared earlier in front
of verbs.

Li notes that a sentence like (185), which is of the
form (182 b), is unacceptable in Modern Chinese.

(185)   *Zhangsan ba Li-si ma zai wuzi-li
          "Zhangsan blamed Li-si in the house."

The ungrammaticality of (185) is certainly due to the impro-
per position of the prepositional phrase zai wuzi-li. Li
claims that Chinese has moved beyond the intermediate structure
and into SOV word order. But we can find that this is not
true. Consider

(186)   Zhangsan zai wuzi-li ma Li-si

Sentence (186), with the prepositional phrase preceding the
verb and the object following it, is grammatical and may be
somewhat preferable to (183). Note that the structure of
(186) is

(187)   S + PP + V + O

This structure is very common in today's Chinese.

(188)   ta <u>yong</u> <u>dauzi</u> <u>sha</u> <u>zi</u>
             use knife kill chicken
             "He killed the chicken with a knife."

(189)   ta <u>cong</u> <u>kongsi</u> <u>hwei</u> <u>chia</u> le
             from office returen home
             "He returned home from the office."

However, in Li's analysis, there is no stage like (187).

Furthermore, we find that many sentences with the structure (182 c) are ungrammatical in Modern Chinese.

(190)   *ta yong dauzi ba zi sha
             "He killed the chicken with a knife."

(191)   ta yong dauzi ba zi sha <u>le</u>

(192)   *ta zai fangzi-li ba fan zi
             "He eats rice in the house."

(193)   ta zai fangzi-li ba fan zi-<u>del</u>
                                           away
             "He has eaten up the rice in the house."

Obviously, (190) and (192) violate the constraints on the <u>ba</u> construction which I discussed in Chapter II. The <u>ba</u> construction is very limited and cannot be the basic form in Modern Chinese.

The discussion above strongly indicates that Li's description of the stages of the word order shift is inadequate and incorrect. The intermediate stage should be S + PP + V + O, not S + O + V + PP. And if my proposed stages are correct, then Modern Chinese should be in the intermediate stage moving toward the third stage. This can explain not only the ungrammaticality of (185) but also some structures with the prepositional phrases following the verbs.

(194)   ta <u>zu</u> zai chia-li
             <u>live</u>
             "He lives at home."

(195)   ta zai chia-li zu

The prepositional phrase <u>zai chia-li</u> in (194) is after the verb <u>zu</u>. But <u>zu</u> is certainly not one of those verbs "whose semantic content is conducive to the further specification of a physical direction", and <u>zai chia-li</u> is just a locative prepositional phrase, having nothing to do with direction. The fact that dative and some locative prepositional phrases can be optionally moved to the right of the verbs and that the <u>ba</u> construction is very limited and constrained indicates that Chinese has just gone beyond the first stage (i.e. S + V + O + PP) and is now in the intermediate stage (i.e. S + PP + V + O) but moving toward the final stage (i.e. S + PP + O + V).

3.   Word Order Change and Definiteness vs. Indefiniteness

3.1.   In Modern Chinese, word order plays a very important role in distinguishing definite from indefinite nouns.

(196)   <u>shia yu le</u>
             <u>fall rain asp.</u>
             "It is raining."

(197)   yu shia le
             "This rain is falling."

(198)   <u>shi ren le</u>
             <u>die man</u>
             "Some people died."

(199)   ren shi le
             "The man died."

In (196) and (198), the subjects yu and ren are after the verbs shia and shi, and they are interpreted as indefinite. In (197) and (199), yu and ren are before the verbs, and they are interpreted as definite. The following illustrates the same pattern.

(200) Zhangsan da po le chuanghu
       hit break window
     "Zhangsan has broken a window."

(201) Zhangsan ba chuanghu da po le
     "Zhangsan has broken the window."

(202) wo xi-wan yifu le
     wash-finish clothes
     "I have finished washing clothes."

(203) wo ba yifu xi-wan le
     "I have finished washing the clothes."

  Li and Thompson (1975: 170) generalize these observation as:

> Tendency A
>
> Nouns preceding the verbs tend to be definite,
> while those following the verbs tend to be
> indefinite.

Obviously, Tendency A is much too strong. Li and Thompson note that proper nouns, nouns after bei, and nouns in prepositional phrases are immune to Tendency A.

(204) wo dale Zhangsan
     "I hit Zhangsan."

(205) su bei haizi mai-le
     book child buy-asp.
     "The book was bought by {the/a} child."

(206)   wo zai <u>ziezi-li</u> <u>zi</u> <u>fan</u>
                <u>car- in</u> <u>eat</u> <u>rice</u>
          "I had my meal in {the} car."
                              { a }

So they modify Tendency A with the following refinements:[19]

(207)   a. The noun in post-verbal position will be in-
              terpreted as indefinite unless it is morpho-
              logically, inherently or non-anaphorically
              definite.

          b. The noun following <u>bei</u>, although pre-verbal,
              is immune to Tendency A.

          c. Nouns in prepositional phrases are immune to
              Tendency A.

The definiteness and indefiniteness of nouns distinguished by
word order is a very interesting problem in the grammar of
Modern Chinese. However, here I am only concerned with its
relation to word order change.

3.2.   It has been observed that in Archaic and Ancient Chinese,
word order does not bear the function of distinguishing de-
finiteness and indefiniteness of nouns. Word order is SVO,

---

(19) The fact that proper nouns, nouns after <u>bei</u>, nouns in pre-
      positional phrase are immune to Tendency A can be explained.
      Proper nouns can only be definite, so they cannot be inter-
      preted as indefinite even post-verbally. Nouns after <u>bei</u>,
      and most prepositional phrases can only appear in front of
      the verbs, so they cannot be distinguished as definite from
      indefinite by the word order. But object nouns may be in
      pre-verbal position (with <u>ba</u>) or in post-verbal position
      (without <u>ba</u>), so they can be distinguished with word order.

and nouns preceding verbs can be either definite or inde-
finite.

(208)   shong   bu   ziau chi di
         elder brother not teach his younger brother
         "{An } elder brother doesn't teach his younger
          {The}
         brother."

(209)   hwang si ren lai wen
         king send   to ask
         "{The} king sends some people to ask."
          {A }

Then it is certain that the use of word order to distinguish
definiteness and indefiniteness of nouns did not begin earlier
than Middle Chinese (800 A.D.) and that it followed the word
order change itself.

   Notice that the use of word order to distinguish definite-
ness and indefiniteness of nouns conflicts somewhat with the
word order change. In Archaic and Ancient Chinese, no subject
can follow the verb. But in Modern Chinese, the indefinite
noun has to be after the verb. Thus there needs to be a rule
in the grammar to postpose the indefinite nouns to the right
of the verbs. But the word order shift from SVO to SOV has the
effect of locating all the nominals to the left of the verbs.
So there are two conflicting trends represented in the word
order of Modern Chinese.

3.3.   We may wonder which of these two conflicting trend will
prevail, or if they will co-exist for a long time without
changing the present status.

The answer to this question is quite obvious when we go to the morphological change of the word order used to distinguish definite and indefinite nouns.

Li and Thompson (1975) cite some examples of the position of definite and indefinite nouns from Mullie (1932).

(210)   lai le bing
             come asp. soldier
             "There came soldiers."

(211)   pau le zei
             run   thief
             "There escaped a thief."

(212)   si ren le
             die person
             "A man died."

(213)   bing lai le
             soldier come
             "The soldiers have come."

(214)   zei pau le
             thief run
             "The thief has run away."

(215)   ren si le
             person die
             "The man is dead."

Notice that when Mullie describes Chinese, the indefinite nouns as subjects always follow the verbs. We can still find this constsuction in today's Chinese, as noted above:

(216)   shia yu le
             fall rain
             "It has rained; Some rain fell."

(217)   lai-le   ke ren
                come-asp. guest
                "There came some guests."

Now it is more usual to have indefinite nouns preceding the

main verb and following the existential verb you.

(218)   you   bing   lai le
                exist soldier come
                "There came some soldiers."

(219)   you   zei   pau le
                exist thief run
                "There escaped a thief."

(220)   you   ren   si le
                exist person die
                "A man has died."

(221)   you ren chyu le
                exist   go
                "Some people have gone."

This is obviously a big change. We have already noted that

prepositions in Modern Chinese derive historically from verbs

in Archaic and Ancient Chinese, and also that it is quite com-

mon to have the structure P + NP + V in Modern Chinese. I

assume that you will gradually become a preposition in later

Chinese. Consider,

(222)   wo you yiben su
                   have a   book
                "I have a book."

(223)   ta mei you lai
                   not have come
                "He has not come."

(224)   you   yige ren lai le
                exist one
                "There came a man."

In (222), _you_ functions as a verb, while in (223) as a perfective marker (also as auxiliary?). But in (224) it functions only as an existential marker, like _there_ in English. If it functions as a existential marker, it has to cooccur with another verb which is the main verb in the sentence.

(225)   _you_ ren _da_ wo
           exist   hit
           "Someone has hit me."

(226)   *you ren

So, it would be very reasonable to assume that _you_ will become a preposition. Then in later Chinese, these indefinite nouns will occur in the structure P + NP + V, which is derived from V + NP + V. They will no longer occur to the right of verb. From V + NP to P + NP + V, it is obvious that the indefinite structure has stepped toward SOV word order. That means, the word order change will prevail.

3.3.   More evidence supporting my claim that the word order shift will prevail is the increasing use of the determiners and classifiers in Modern Chinese.

(227)   _lai_ le ren
           come
           "There came a man."

(228)   lai le _yige_ ren
                   one
           "There came a man."

(229)   you yige ren lai le
           "There came a man."

(230)   ren ze   wu di
                 kind person no enemy
                 "A kind man has no enemy."

(231)   yige ren-si de ren mei you di-ren
                 one kind   not have enemy
                 "A kind man has no enemy."

(232)   wo diu le su
                     lose book
                 "I lost a book."

(233)   wo diu le yiben su
                             one
                 "I lost a book."

The fact that there is an increasing use of the determiners and classifiers in Modern Chinese indicates that the definiteness and indefiniteness of nouns may not need to be expressed by word order in the future since the determiners and classifiers can take this task. This can be illustrated with the ba construction. It has been observed that if an object is definite, it will occur to the left of the verb. (See III. 3.1. p. 47)

(234)   wo ba su diu le
                       book lose
                 "I lost the book."

(235)   wo ba chuanghu da po le
                       window hit break
                 "I have broken the window."

However, the ba constructuion can be used with indefinite nouns with classifiers:

(236)   wo ba yiben su diu le
                         one
                 "I have lost a book."

(237)   wo ba <u>yige</u> <u>chuanghu</u> da po le
                 one   window
           "I have broken a window."

The increasing use of the <u>ba</u> construction with indefinite
nouns, within the limits of the constraints mentioned in
Chapter II, suggests that SOV is becoming more and more
preferable over SVO.

So Li and Thompson (1975) state that "the gradual ascen-
dency of the SOV word order can be seen as one side of a phe-
nomenon whose other side is the gradual demise of the SVO
word order....If the SVO sentences are gradually being eliminated,
Tendency A must become weaker" (p. 188). Consequently, if the
word order change to SOV is completed, the use of the word or-
der to distinguish the definiteness and indefiniteness of
of nouns can no longer exist.

4.   In this chapter, we have discussed the word order shift
in Chinese which began in the Han dynasty, more than two mil-
lennia ago, and remains uncompleted today. We have also dis-
cussed the direction and the stages of the word order shift.
The use of word order to distinguish the definiteness and in-
definiteness of nouns and its relation with the word order
change is also mentioned and discussed. It has been proposed
in this study that the word order change will prevail and
that the present function of word order to express definiteness
and indefiniteness will be taken over by the determiners and
classifiers like <u>yige</u>, <u>yiben</u>, <u>yichiang</u> and so on.

Discussing the word order shift, we have noted that the highly complex structure of word order in Modern Chinese is largely due to the word order shift from SVO to SOV. However, as we have noted above, the word order shift has just gone beyond the first stage and is now in the intermediate stage. Though moving into the third stage, Chinese can not be said to be an SOV language yet. Other evidence to support the claim that Chinese is not presently an SOV language has been discussed in Chapter II. If current trends continue, one can imagine that the dominant SVO word order will sooner or later be replaced by SOV word order in Chinese.

IV. Conclusion

Upon the completion of this thesis, I find that the work is not satisfactory, especailly the chapter against Tai's Chinese as an SOV language hypothesis. My arguments against Tai's theory, though may not be wrong, are indeed quite weak. The weakness, I think, is largely due to the poor understanding of the deep structure word order in present studies of linguistics. Though word order has attracted more attention and discussions its nature is not very certain yet. In discussing the word order, the most evidence used is Greenberg's (1966) statistical statements, markedness convention and so. But they cannot explain anything as Sanders (1975) points out they have little explanatory power. Thus, it is really hard to justify the basic word order of some particular languages.

The other reason I can think of is because of the highly complex grammar of Modern Chinese. As Chinese is undergoing a word order shift from SVO to SOV, its structure is highly complicated by the existence of SOV and SVO characteristics. Thus, one can always say Chinese is an SVO or SOV language by pointing out some characteristics of each word order.

In order to be more effective in judging which word order Chinese has, further and deeper investigation is badly needed. And this work just gives a very brief survey and discussion of the Chinese word order.

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ON CHINESE WORD ORDER AND WORD ORDER CHANGE

by

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ABSTRACT

In surface structure, Chinese exhibits both SVO and SOV
word orders. Tai (1973) proposes that Chinese has underlying
SOV word order, SVO being derived from SOV through a rule of
NP-V inversion. Tai justifies his theory with the <u>ba</u> and <u>bei</u>
constructions, the ordering relation between the relative clauses
and the head nouns, and preposition vs. postposition. He claims
that the <u>ba</u> construction is the basic form and that in underlying
structure, the Chinese relative clauses are ordered after the
head nouns and then preposed to the front of the head nouns by
a universal rule Relative Clause Preposing which must obliga-
torily apply if the language has verbs in clause-final position.
Tai further proposes that prepositions and postpositions in
Chinese are real verbs and that postpositions are derived from
underlying predicates by copying the underlying predicates to
nouns phrases and deleting the original predicates.

However, Tai's theory and arguments are unconvincing and
incorrect. I argue that the <u>ba</u> construction cannot be the basic
form and that the Chinese relative clauses are not ordered after
the head nouns in underlying structure, but rather before the
head nouns. And I also argue that Chinese postpositions cannot
be treated as verbs and that there are structural differences
betwen verbs and prepositions. Thus, I conclude that Chinese
is not an SOV language.

It has been suggested in recent literature that the incon-
sistency of word orders is always the result of word order change.
As Chinese exhibits both SVO and SOV word order, it leads to a

general assumption that Chinese is undergoing word order change. Evidence is given to prove that there has been word order change from SVO toward SOV. The word order change began in the Early Han dynasty, more than two millennia ago, and is not yet completed in Modern Chinese.

The relation of word order change to the use of word order to express the definiteness and indefiniteness of nouns is also discussed. There has been speculation about which of these two conflicting trends will prevail or if they will co-exist without changing the present status. Evidence is given to show that word order change will prevail.

It is concluded that the confusion of Modern Chinese word order is largely due to the word order shift from SVO to SOV, and that Chinese has gone beyond the first stage (i.e. S + V + PP + O) and is now in the intermediate stage (i.e. S + PP + V + O) and moving forward to the final stage (i.e. S + PP + O + V).