This paper attempts to outline the typological property of Chinese as a paratactic language, as distinguished from a hypotactic language like English. In a paratactic language, connective elements are often optional or unnecessary while the opposite is true in a hypotactic language. It is proposed that 'parataxis' be added to the clustering of distinctive properties that constitute a more general typological parameter which distinguishes Chinese as a discourse-oriented language from English as a sentence-oriented language. It is also argued that the recognition of parataxis as a distinctive typological property of Chinese will shed some light on the problem of the so-called 'double-subject' construction, and will cast some doubt on the traditional characterization of an analytical language like Chinese.

1. Introduction

In this paper I will make an initial attempt to outline features of Chinese as a paratactic language, as distinguished from a hypotactic language like English. The term 'paratactic' is used in a broad sense to refer to the typological property of a language in which such function words as conjunctions, conjunctive adverbs, and prepositions (and postpositions1) are very often not used or required to denote logical and semantic relationships between elements within sentences.2 In Chinese, such relationships are very often implied rather than expressed lexically when they are understood from context.

An example from Chao (1968: 753) will illustrate this property of Chinese:

(1) Nianshu xiezi hai mei zhaodao ge qingjing de difang ne.
studying writing still not find a(CL) quiet MOD place PRT
As for studying and writing, I have not yet found a quiet place.3

It is not hard to see that the Chinese original lacks the words underlined in the English translation. Specifically, the words 'missing' in the Chinese are equivalents for the English preposition as for, conjunction and, and pronoun I. In the English translation, the preposition as for introduces a PP and relates it to the main clause as adverbial adjunct; the conjunction and coordinates two NPs in the adjunct, and the pronoun I functions as the subject of the sentence. They are all indispensable to make the sentence grammatical in English in a normal context. On the other hand, however, their counterparts are absent from the original Chinese sentence not because Chinese does not have them, as can be seen when (1) above is rewritten as (1') below:

(1') Ziyu nianshu he xiezi, wo hai mei zhaodao ge qingjin de difang ne
as for studying and writing, I still not find a(CL) quiet MOD place PRT
As for studying and writing, I have not yet found a quiet place.

When the 'missing words' are supplied, the Chinese sentence becomes closely parallel to its English translation.

For our purposes, each of the underlined words supplied in (1') shows a significant difference between English and Chinese. First, in Chinese the subject pronoun wo 'I' can be, and very often is, dropped and implicit when it is understood from context. On the other hand, its
English counterpart is generally required for grammaticality even though it is predictable in context. Second, the Chinese preposition ziyou 'as for' is not required to appear as in (1), but its English counterpart as for is required in the translation. Third, the conjunction he 'and' is usually not used to connect coordinate elements in Chinese, as in (1), unless special emphasis is needed. In contrast, its English equivalent and is always required in the same context.

The three differences between the Chinese sentence and its English translation in (1) demonstrate two important typological differences between Chinese and English in general. First, absence vs. presence of the subject pronoun reflects the distinction between Chinese as a [+prodrop] language and English as a [-prodrop] one. Secondly, the difference between the absence and presence of the preposition and conjunction illustrates a typological distinction between Chinese as a paratactic language and English as a hypotactic one. While the first typological distinction has been a major topic of much literature, it is the aim of this paper to discuss the property of Chinese as a paratactic language, as opposed to a hypotactic language like English.

2. Wang's Discussion: A Historical Perspective

The typological characterization of Chinese as a paratactic language is not new. Wang (1943; 1945) addressed it in some detail about five decades ago. His basic proposal was that Chinese is content with yihe 'notional coherence' while Western languages stress xinghe 'formal cohesion'. To distinguish the two, he applied the labels parataxis and hypotaxis. According to him, Chinese is really distinguished by a lack of such function words as connectives. Thus, he argued, 'While parataxis is a deviance in Western languages, it is a norm in Chinese' (1945: 90). He illustrated his point (ibid.) with the pair of sentences reproduced here as (2a, b):

(2) a. Ni si le, wo zuo heshang.
you die ASP, I be monk

b. Ruguo ni si le, wo zuo heshang.
if you die ASP, I be monk

If you should die, I will/would become a monk.

(2a) should not be seen as having resulted from (2b) through the deletion of the conjunction ruguo 'if' since sentences like (2a) are more frequent than ones like (2b) in everyday language. With or without the conjunction, (2a) and (2b) are interpreted exactly the same by native speakers. Grammatically, ni si le 'you die' in (2a) and ruguo ni se le 'if you die' in (2b) function as adverbials (of condition) in the sentence. According to Wang, however, (2b) should be seen as more 'marked', at the time of his writing, as evidence of a process of language change which Chinese had been undergoing since the beginning of this century, and which he calls 'Europeanization' (although 'Westernization' seems to be a more accurate term). In both of his books (1943; 1945), he devoted an entire chapter to describing and discussing the phenomenon, in which he includes features such as increased use of subjects and copula verbs, extension of sentence length, imitation of Western languages' use of passive voice and connective elements, etc. Especially relevant here is the change in the use of connective elements in Chinese.

As Wang argues, Chinese used to have a very limited number of conjunctions, and almost no prepositions at all (Wang 1945: 239). In the trend of 'Europeanization', however, the use of connective elements had increased greatly, especially in translations, characterized by three features. First of all, the existing connectives were used with greater scope and with greater frequency. Secondly, new connectives were coined by using certain verbs in a connective function. Thirdly, the number of coined connectives was further increased by combining certain verbs with existing conjunctions (1943: 496). The new connective elements include, for instance, huo/houze 'or', danshi 'but', yinwei 'for/because', sui 'though/although', dang...(de shihou) 'when/as', ru/ruo 'if', zai...li 'in', zai...shang 'on/upon/over/above', zai...xia 'under/beneath/below', zai...dangzhong 'among', guanyu/ziyu 'as for', etc. (1945: 470-4). As Wang suggests, the effect of 'Europeanization' is the lexicalization of logical relationships among sentence elements which used to be implied rather than expressed.
3. Paratactic Features of Modern Chinese

Despite all the changes caused by 'Europeanization', modern Chinese still strongly retains the character of a paratactic language. Even though by now Chinese has greatly increased its connective elements which are comparable in function to those in English, their use is very often optional, and sometimes unnecessary, unlike their English equivalents. In this section I will illustrate this property of Chinese with examples.

We will first examine conjunctions and conjunctive adverbs. These connectives can be divided into two major classes: coordinate and subordinate. In Chinese, coordination is very often not marked by an overt connective. As Chao (1968) points out, 'The simplest and most frequent marker of coordination is zero; in other words the coordinated expressions occur in simple succession, ...' (p. 262). Thus, in Chinese one would be more likely to say fu zi 'father (and) son', fu fu 'husband (and) wife', di xiong 'younger (and) elder brothers', shan shui 'mountains (and) waters', and chi he 'eat (and) drink', rather than put any coordinate conjunction in between. To make the point clearer, all of the parenthesized coordinating conjunctions in the following sentences are optional, and can be dropped with no loss of clarity:

(3) Ta xihuan yinyue (he) meishu.
He likes music and art.

(4) Ta shi yi-ge nianqing (erqie) maomei de nüzi.
She is a young and beautiful lady.

(5) Wo xianzai yao zuo de shi chifan (gen) shuijiao.
What I need to do now is eating and sleeping.

(6) Ni qu (haishi) bu qu?
Are you going or not?

(7) Wo chi fan (huozhe) chi mian dou keyi.
It's fine to me if I eat rice or noodles.

(8) Bu chi yao, bing dangran bu hui hao,
If you don't take medicine, you will not recover from your sickness. Conversely, if you don't take medicine properly, it will also do harm to your health.

Not only are zero connectives common in coordinate constructions, they are common in subordinate constructions as well. Given below are just a few examples where connectives, conjunctions or adverbs, are optional (in parentheses), and in some cases unnecessary.

(9) Ni chi wan (yihou) wo (zai) chi.
After you've finished eating, I'll then eat after you've finished eating.

(10) (Ruguo) ni bu qu(,) wo (jiu) qu.
If you don't go, I will/I'll go if you don't.
(11) (Jishi) ni pai le (wo,) wo ye bu qu. 
(even if) you send ASP (I,) I also not go 
Even if you send me, I will not go.

(12) (Zongran) dao ge zai bozi shang(,) wo ye bu qu. 
(even though) knife lay at neck on (,) I also not go 
Even though a knife is laid at my neck, I will not go/I will not go even with a knife laid at my neck.

(13) Ta (yinwei) taitai bing le(,) (suoyi) bu neng lai. 
he (because) wife ill ASP(,) (so) not can come 
Because his wife is ill, he cannot come.

(14) Ta (suiran) fa le cai(,) (danshi) renjiu bu kuaile. 
he (although) make ASP fortune(,) (but) still not happy 
Although he has got rich, he is still unhappy.

The connectives given in parentheses in the sentences above denote a variety of semantic or logical relationships between the two clauses of the sentences. Native speakers of Chinese, nevertheless, will not fail to sort out these relationships even in the absence of the overt markers. As a matter of fact, it is always desirable to leave out those overt markers whenever the relationships they denote are clear or apparent from context, especially in informal style or oral communication. It should be pointed out that, in the above examples, not only can the connectives be left out, but the two clauses can be 'compressed' into one (without any pause in between, as denoted by a comma in written discourse), becoming what is generally referred to as 'compressed sentences', which constitute a special characteristic, and an interesting phenomenon, of Chinese. To further illustrate how parataxis is preferred in Chinese, I will cite three more compressed sentences which can be seen as each consisting of three or four clauses compressed into one:

(15) Wo shou zhe ban zhemo buru si le ganjing. 
I suffer this kind torment not as good as die ASP clean 
When I suffer such torment, I'd rather die, which would make it tidy for me. (i.e. a 'clean' death; better than suffering)

(16) Ni ai wo geng yao baozhong shenzi cai hao. 
you love me more need take-care body thus good 
If you love me, you should take better care of yourself, and only thus we would be the better.

(17) Pingguo ni na buliao fang bao li ma bang ni na hao bu hao? 
apples you take unable put bag in mom help you take good not good 
As for apples, if you can't take them, put them into the bag, and Mom will take them for you. Will that be OK?

In the above three examples, function words are dropped out so that conciseness is achieved at no cost of clarity. Compressed sentences are thus preferable in Chinese in many contexts, and the ability to use them appropriately is associated with sophistication in language use. As Wang (1945: 141) suggests, almost every type of compound or complex sentence can be condensed into a compressed sentence.

Now we will turn to prepositions in Chinese. Just like conjunctions and conjunctive adverbs, prepositions (and/or postpositions) in Chinese are also optional in certain contexts. The following are some examples:

(15) Wo shou zhe ban zhemo buru si le ganjing. 
I suffer this kind torment not as good as die ASP clean 
When I suffer such torment, I'd rather die, which would make it tidy for me. (i.e. a 'clean' death; better than suffering)

(16) Ni ai wo geng yao baozhong shenzi cai hao. 
you love me more need take-care body thus good 
If you love me, you should take better care of yourself, and only thus we would be the better.

(17) Pingguo ni na buliao fang bao li ma bang ni na hao bu hao? 
apples you take unable put bag in mom help you take good not good 
As for apples, if you can't take them, put them into the bag, and Mom will take them for you. Will that be OK?
(18) (Dang) wo zai kan (de shihou,) que kan bu jian shenme.  
(At) I again look (MOD time,) yet look not see what  
When I looked again, I could see nothing.

(19) Ta (zai) shangban (de shihou,) yao huan liang-ci che.  
he (during) go to work (MOD time,) need change two-CL bus  
When he goes to work, he needs to change buses twice.

(20) Ta shi (cong) Beijing lai de.  
he be (from) Beijing come PRT  
He is from Beijing.

(21) (Cong) shulin (li) tiao chu lai yi-zhi laohu.  
(From) wood (inside) jump out come one-CL tiger  
From inside the woods jumped out a tiger.

(22) Wo zhao yi-ben shu (gei) ni kan.  
I find one-CL book (for) you read  
I'll find a book for you to read.

(23) Tamen (yu) daxue biye shi fenshou, yizhi wei zai jianmian.  
they (upon) college graduation time part, ever since not again see each other  
They parted upon graduation from the college, and have not seen each other again ever since.

(24) Ta neng (yong) zuo shou xiezi.  
he can (with) left hand write  
He can write with his left hand.

(25) Wo (zai) san dianzhong yao kai hui.  
I (at) three o'clock will have meeting  
I will have a meeting at three o'clock.

(26) Women mingtian (zai) jichang jian.  
we tomorrow (at) airport meet  
We will meet at the airport tomorrow.

(27) (Zai) zhe yi dian (shang), Hanyu ye he xiyang yuyan bu tong.  
(at) this one point (on), Chinese also with Western language not same  
At this point, Chinese is also not the same as Western languages.

(28) (Duiyu/Guanyu) zhei-jian shi, wo bu xiang fabiao shenme kanfa.  
(with regard to) this-CL matter, I not want voice whatever opinion  
With regard to this matter, I don't want to voice any opinion.

(29) (Ziyu) zhe yi fenbie, que bu shi (youyu) mofang Yingyu.  
(as for) this one differentiation, yet not be (due to) imitate English  
As for this differentiation, it is not due to imitation of English.

In all the examples above, prepositions (and postpositions in (21) and (27)) are optional, and can be dropped at no loss of meaning. However, the degree of optionality may vary in some cases depending on the syntactic environments in which they occur. For instance, in (20') below, which differs from (20) in that it does not employ the 'shi...de' emphatic structure and is thus less stative, the preposition cong 'from' is not optional:
(20) Ta cong Beijing lai.
    he from Beijing come
He came from Beijing.

Also in (21'), which can be seen as a synonymic sentence of (21), the preposition and postposition are required in the untopicalized adverbial adjunct:

(21') Yi-zhi laohu cong shulin li tiao chu lai.
    one-CL tiger from wood inside jump out come
A tiger jumped out from inside the woods.

It might appear that the process of topicalization is responsible for the difference, but this hypothesis is falsified by (27') below in which both preposition and postposition are optional even if the PP occurs in the sentence-internal adjunct position after the subject Hanyu 'Chinese':

(27) Hanyu (zai) zhe yi dian (shang) ye he xiyang yuyan bu tong.
    Chinese (at) this one point (on) also with Western language not same
Chinese is also not the same as Western languages at this point.

Why this should be so still remains an unsolved problem. But it should not affect our claim that in Chinese prepositions (and postpositions) are very often optional, as opposed to their counterparts in English.

Another fact that is relevant here is that there exists in Chinese some semantic parallelism between syntactically different preverbal adverbials and postverbal complements. While the preverbal adverbial is usually a PP, the postverbal complement is generally an NP. Some examples are:

(30) a. Ta zai xiao fangjian (li) zhu.
    he at small room (in) live
he lives in the small room.

b. Ta zhu xiao fangjian.
    he live small room
He lives in the small room.

(31) a. Ta pingshi zai shitang (li) chi.
    he ordinarily at canteen (in) eat
he ordinarily eats at the canteen.

b. Ta pingshi chi shitang.
    he ordinarily eat canteen
He ordinarily eats at the canteen.

(32) a. Ta yi-ge ren yong da wan chi.
    he one-CL person with big bowl eat
He alone eats with a big bowl.

b. Ta yi-ge ren chi da wan.
    he one-CL person eat big bowl
He alone eats with a big bowl.

(33) a. Ta xihuan yong maobi xie.
    he like with brush pen write
He likes to write with a brush pen.

In all the pairs above, PPs in sentence (a) occur in preverbal position while NPs in sentence (b) take the postverbal position, but their semantic roles remain constant: those in (30) and (31) are
LOCATIVE whereas those in (32) and (33) are INSTRUMENTAL. It may be assumed that the 
(b) sentences, without prepositions (and postpositions), are more preferable over the (a) 
sentences among native Chinese speakers.

Finally, I would cite two examples (from Fan 1984) to show that in Chinese, sometimes 
content words, as well as function words, can be omitted for the purpose of economy. The result 
is a number of NPs piling up in sentence-initial position:

(34) Longtanhu Dongdan huan ba lu. 
Longtan Lake Dongdan change eight route 
To go to Longtan Lake you change to No. 8 bus at Dongdan.

(35) Zhe-pian wenzhang wo de yijian zuihou yi duan ni zuihao buchong 
this-CL paper I MOD suggestion last one paragraph you better add 
dianr cailiao. 
a little material 
Regarding this paper my suggestion is that in the last paragraph you'd better add a little 
more material.

In (34) the two initial NPs are both place names, but the first is the GOAL while the second is the 
LOCATIVE. The omission of the sentence-initial verb *qu* 'to go to', the pronoun *ni* 'you', and the 
preposition *zai* 'at' has resulted in bare NPs juxtaposed without linkage. Similar, but even more 
obvious is (35) where four NPs (*zhe-pian wenzhang* 'this paper', *wo de yijian* 'my suggestion', 
*zuihou yi duan* 'the last paragraph', and *ni* 'you') are juxtaposed without any overt linkage in 
sentence-initial position. For comparison, a more basic form is given in (35') below:

(35') Dui zhe-pian wenzhang wo de yijian shi, 
regarding this-CL paper I MOD suggestion be, 
ni zuihao zai zuihou yi duan li buchong dianr cailiao. 
you better at last one paragraph in add a little material 
Regarding this paper, my suggestion is that you'd better add a little more material to the 
last paragraph.

In a sentence like this, as can be seen, not only are the prepositions *dui* 'regarding' and *zai* 'at' and 
postposition *li* 'in' optional, but so too is the copula *shi* 'be'. With all the links 'missing', these two 
sentences should illustrate that what is impossible in English is not only possible but common in 
Chinese. And that is the primary reason for stressing this typological distinction between Chinese 
and English.

4. 'Double Subjects' in Light of the Property of Parataxis

Thus far, I have outlined the typological property of parataxis in Chinese. I have shown 
with examples that in Chinese, connective elements such as coordinate and subordinate 
conjunctions and adverbs, and prepositions, and in some cases, postpositions, are very often 
optional or unnecessary. This property of modern Chinese, as the preceding discussion 
suggested, was even more characteristic of earlier stages of the language. Historically, Chinese 
lacked conjunctions and prepositions. A quantitative study of a series of historical texts shows 
that over 92% of sentences have their elements joined by means of parataxis (from Sheng 1988: 
44). Modern Chinese, as Wang suggested, has greatly enriched its lexicon of connectives, 
especially in this century, due to the influence of Western languages. The influence is still 
increasing, but it has not yet overridden the most fundamental principle in the use of Chinese: the 
Principle of Economy. A shorter form is preferred as long as it will not cost clarity. Function 
words, carrying less lexical information, are therefore often omitted. Based on historical facts 
and empirical observation, I propose that 'parataxis' be added to what Huang (1984) calls 'a 
clustering of distinctive properties' that distinguish Chinese typologically. According to Huang, 
the clustering (which includes topic NP deletion, topic prominence, discoursally bound anaphor,
and zero topic distribution) constitutes a more general typological parameter that distinguishes Chinese as a discourse-oriented language as opposed to English as a sentence-oriented language, a typological distinction first proposed by Tsao (1979).

The recognition of parataxis as a typological property of Chinese can, I believe, shed considerable light on the so-called 'double-subject' or 'double-nominative' sentences. The problem of 'double-subject' or 'double-nominative' constructions is a longstanding one in Chinese syntax. This is particularly true of those double subjects of which one is not an argument or does not bind an argument position. Given below as (36), (37) and (38) are three often-cited examples:

(36) Nei-ke shu vezi da.
    that-CL tree leaf big
The leaves of that tree are big/As for that tree, its leaves are big.

(37) Nei-kuai tian women zhong daozi.
    that-CL field we grow nee
In that field, we grow rice/As for that field, we grow rice.

(38) Nei-chang huo xingk:ui xiaofangdui lai de kuai.
    that-CL fire fortunate fire-brigade come COM quick
As for that fire, fortunately the fire-brigade came quickly.

The underlined NPs are 'double subjects'. Chao (1968) calls the first NP the 'main subject' and the second NP the 'minor subject'. According to him, the minor subject and the predicate that follows it consist of a so-called 'sentential predicate' (SP). Following this analysis, Teng (1974) gives the tree diagram in (39a) below to represent the structure of sentences of this kind:

(39) a. S
    / \    b. S'
   NP VP TOP S
   / \                / \  
  S NP VP

Li and Thompson (1976) and Tsao (1979) are unsatisfied with this account because they feel that the analysis of an S immediately dominated by the VP is problematic. Despite the differences between them, they both argue that the first NP should be considered a topic (which Chafe (1976) calls a 'Chinese style' topic) rather than the sentence subject. Topic is commonly said to be a discourse notion as opposed to sentence subject which is a syntactic notion. The tree diagram in (39b) above is a more generally accepted schema. A problem, however, exists in the argument of topic as a discourse notion. As Her (1991) points out, if 'topic' is purely a discourse notion, the grammatical function of the sentence-initial NP is unclear if it is neither subject nor object. Her (1991), therefore, proposes that topic be a syntactic notion parallel to subject and object. However, I consider Her's proposal unsatisfactory for two reasons. First, it makes Chinese, with an extra grammatical function of topic, incomparable with other languages such as English. Secondly and more importantly, it covers up the underlying syntactic relationships that topic bears with the following comment clause in most of the cases, and therefore fails to reveal the true nature of topicalization as a dynamic process.

A more recent suggestion made by Schlobinski and Schutze-Coburn (1992) is to abandon the notion of topic all together since they believe the term is too inclusive as well as too elusive. One of their arguments is that even with Chinese, a so-called topic-prominent language, the notion of topic is unnecessary. Citing an example similar to (36) above, they argue that the sentence-initial topic NP can be analyzed as the modifier of the second NP, thus doing away with
the analysis of it as the topic. But clearly their solution is insufficient for two reasons. First, it
cannot account for the difference native speakers perceive between, for instance, (36), repeated
here, and (36') below:

(36) Nei-ke shu yezi da.
that-CL tree leaf big
The leaves of that tree are big/As for that tree, its leaves are big.

As pointed out by Tsao (1979), these two sentences differ in what the sentence is about: the
former without the overt modifier marker de is about the tree itself while the latter with de is
about the leaves growing on the tree. In contrast to all previous views, my account of the
difference between (36) and (36') is to see it as the effect of different ranges of topics. In (36)
only the modifier within the subject NP is topicalized whereas in (36') the whole subject NP is
the range of topicalization, as shown by the bracketing under them.8

The second reason that makes Schlobinski and Schutze-Coburn's solution inadequate is
that only a subset of double-subject constructions in Chinese have the modifier-modified
semantic relationship between the two subjects, and thus their solution is not applicable to those
double-subject constructions such as in (37) and (38) above.

Historically, sentences like (37) and (38) have been a problem for many linguistic
analyses. The problem mainly revolves around the sentence-initial NP. Now that we recognize
that parataxis is an inherent typological property of Chinese as a discourse-oriented language,
this problem should no longer stand. As a matter of fact, it devolves into a question of optionality
of preposition (and postposition), as we can see from (37'), (37'') and (38') below:

(37) Zai nei-kuai tian li women zhong daozi.
at that-CL field in we grow rice
In that field we grow rice.

(37') Zivy nei-kuai tian, women zhong daozi.
as for that-CL field, we grow rice
As for that field, we grow rice.

(38) Zivy nei-chang huo, xingkui xiaofangdui lai de kuai.
as for that-CL fire, fortunate fire-brigade come COM quick
As for that fire, fortunately the fire-brigade came quickly.

(37) is the equivalent of both (37') and (37'') and is thus ambiguous;9 the difference consists only
in the presence or absence of formal marking in the form of preposition (and postposition). So is
the difference between (38) and (38'). In a paratactic language like Chinese, however, absence of
formal marking is normal, as we have shown in the previous section. Therefore, my syntactic
analysis of the sentence-initial NPs in (37) and (38) is that they are both adverbial adjuncts in
topic (TOP) position. They differ, however, in that the adjunct in (38) has to be base-generated
while that in (37) may be in topic position as the result of movement from a post-subject position
in the canonical sentence in (40):
Here the parentheses again denote that the preposition and postposition in this sentence are optional. The difference between (37) and (40) is that in the former, the adverbial adjunct is topicalized whereas it is not in the latter. Additionally, the omission of the parenthesized elements in (40) does not create ambiguity as it does in (37).

To sum up, my analysis of (36), (37) and (38) can be demonstrated by the following parsing:

(41) [S' Nei-ke shu· [S [NP [NP ei] [N yezi] ] da ]].

(42) [S' Nei-kuai tian· [S women [VP [V· [NP ei]] [V· zhong [NP daozi]]]].

(43) [S' Nei-chang huo· [S xingkui· [S [NP xiaofangdui] [yp [SPEC ei] [y, lai de kuai]]]].

As we can see, the topics in (41) and (42) are co-indexed respectively with an empty modifier position (within the subject NP) and an empty adjunct position while that in (43) is not co-indexed with any element inside S and therefore has to be generated in the base.

Now, we are in a position to discuss some of the interpretations of Chinese double-subject constructions. First, Li and Thompson, citing the very sentence used in (37) as an example of a basic sentence type in Mandarin Chinese, argue that Greenberg’s classification of basic word order cannot handle sentences like this, where the verb is preceded by two NPs so that neither SOV nor OSV is an appropriate label (1978: 227). Li and Thompson are correct in saying this, but what they have neglected is the fact that the sentence-initial NP is actually an adverbial adjunct of the sentence and therefore should be excluded from the basic word order consideration. With the first NP excluded, the sentence has the basic word order of SVO.

Another view worthy of discussion here is that the difference between the presence or absence of a preposition marks a difference in grammatical function. For instance, Chang (1987) cites the following pair of examples:

(44) a. Duiyu zhei-ge wenti wo you yijian. Regarding this-CL problem I have opinion

b. Zhe-ge wenti wo you yijian. this-CL problem I have opinion

He argues that the ‘omission’ of the preposition duiyu ‘regarding’ in (44b) actually brings about a change in grammatical structure. Before its omission, as in (44a), the sentence-initial PP functions as the adverbial (adjunct) of the sentence; but after its omission, as in (44b), the remaining NP becomes the subject of the sentence. On the other hand, hold a different view. With the recognition of parataxis as a typological property of Chinese, I, on the other hand, hold a different view. Whether 'marked' by a preposition or not, the grammatical function of that phrase remains the same. In other words, the use of the preposition duiyu 'regarding' has not changed the grammatical function of the phrase, but merely made the same function explicit. In short, my point is that in (44b) the NP zhe-ge wenti 'this problem' has exactly the same grammatical function as its English counterpart regarding this problem, which is a PP. While in a hypotactic language like English the function word (in this case, a
preposition) is required as a norm, it is optional and very often not used in a paratactic language like Chinese.

Thirdly, Her (1991), citing the very example used in (38), argues that if topic is a discourse notion, then the sentence-initial NP *nei-chang huo 'that fire'* will have no appropriate syntactic label since it is certainly neither the subject nor an object. Based on this argument, he proposes that the term 'topic' be a syntactic notion parallel to subject and object. As I have shown, the sentence-initial NP is actually an adverbial adjunct syntactically as well as a topic pragmatically. Its grammatical function is exactly the same as that of its English counterpart *as for that fire* in the translation. The only difference lies in that this grammatical function is marked by a preposition in English but not in Chinese. In a paratactic language like Chinese, the use of a preposition is optional, as shown by (38) and (38') in which the sentence-initial NP and PP function exactly the same syntactically--as adverbial adjuncts. Therefore, there is no need to establish 'topic' as a syntactic notion parallel to subject and object, as Her (1991) proposes.

In this section I have examined some so-called 'double-subject' or 'double-nominative' sentences. As the analysis has shown, the so-called 'main subjects', if they do not bind an argument position, can usually be analyzed as either modifiers or adverbials in TOP position. That is, they are playing a double function as both topics at the discourse level and, whether through co-indexation or not, modifiers or adverbials at the syntactic level. Those that are analyzable as adverbials are not recognized as such for two reasons. One is that they are NPs rather than PPs, and it is the latter that is more associated with the syntactic function of adverbial. But as I have shown in the last section, in a paratactic language like Chinese, it is typical for both NPs and PPs to function as adverbials, with the latter as a relatively more recent phenomenon. The second reason is that these NP adverbials are topicalized, and therefore are frame of attention and what the sentence is about. With the more traditional view that the grammatical meaning of subject in Chinese is topic (Chao 1968), they are thus routinely misconstrued as subjects.

To end this section, I would like to quote Chafe's well-known comment on the function of 'Chinese style' topics with reference to English (1976: 50-51):

Typically, it would seem, the topic sets a spatial, temporal, or individual framework within which the main predication holds. In English we can do something similar with certain temporal adverbs: *Tuesday I went to the dentist.* In Chinese apparently this device is generally available, whereas in English in most cases we must use prepositions or other such devices: *In Dwinelle Hall people are always getting lost.* Chinese would not require the *in.*

Chafe's observation is very accurate. But what I would like to point out here is that 'Chinese style' topics, which set 'a spatial, temporal, or individual framework', are syntactically either modifiers or adverbials just like their English equivalents. The only difference, as Chafe has also observed, lies in the fact that a preposition is required in English but not in Chinese for the same purpose. And that is the reflection of a difference between hypotactic and paratactic languages, as has been discussed in the last section.

5. Conclusion

In conclusion, I believe that parataxis is an important typological property that distinguishes Chinese from a hypotactic language like English. The distinction between parataxis and hypotaxis actually characterizes the more general typological parameter between discourse-oriented languages like Chinese and sentence-oriented languages like English. An English sentence is usually a self-contained and closed unit that contains whatever elements are necessary for its interpretation. A Chinese sentence, on the other hand, is often an open unit which is not self-contained in that it is missing certain element(s) which could, though, be retrieved in discourse. In an English sentence, relationships between elements are usually clearly marked by connectives, whereas in a Chinese sentence, such overt marking is often optional or unnecessary. Using a vivid metaphor to describe the difference in sentence structure between
Western languages and Chinese, Wang says 'Western languages are governed by LAW while the Chinese language is governed by MAN' (Wang 1945: 53). By that he means that in terms of form, there is much more flexibility or elasticity in Chinese than in Western languages. To sum up the difference, Wang says that Western languages are 'hard' languages whereas Chinese is a 'soft' language (1945: 141). In terms of the way connectives are used, it is a difference between hypotaxis and parataxis. My proposal in this paper is that this difference be viewed as contributing to a more general typological parameter between sentence-oriented and discourse-oriented languages.

As I have argued, the recognition of parataxis as a typological property of Chinese can resolve a long-standing syntactic problem in Chinese linguistics, namely that of 'double-subject' or 'double-nominative' sentences. The so-called 'main subject' can usually be analyzed as a modifier or adverbial which has been topicalized. Those adverbials in TOP position are generally not recognized as such in Chinese for two reasons. Pragmatically, they are also sentence topics which are the frame of attention or what the sentence is about. Syntactically, they are usually not marked by prepositions as are their counterparts in English.

As I now tend to believe, the recognition of parataxis as a typological property of Chinese will cast some doubt on the traditional view of an analytical language as being one in which function words are important and word order is rigid. It is generally assumed that degree of morphological inflection is negatively correlated with degree of importance of function words and rigidity of word order. Specifically, a less morphologically inflected language should rely more on its function words and word order to carry out its grammatical information. If this is true, Chinese should attach more importance to function words and have more rigid word order than English does. But, as I have tried to demonstrate in this paper, function words actually play a less prominent role in Chinese than in English. As for word order, it is not very rigid in Chinese, or at least not as rigid as it is in English. This fact can be illustrated by a simple example, given in (45b) below, where the parentheses indicate that the preposition *ba is optional in this sentence:

(45) a. Wo xi-le yifu.  (SVO)
    I wash-ASP clothes
    I washed the clothes.

b. Wo (ba) yifu xi-le.  (SOV)
   I (BA) clothes wash-ASP
   * I the clothes washed.

c. Yifu wo xi-le.  (OSV)
   clothes I wash-ASP
   The clothes I washed.

While the patterns in (45a, b, and c) are equally common in Chinese, in English (45b) is not possible at all, and (45c) is by far less common. My hypothesis is that when sentences get longer and more complicated, Chinese will show more flexibility in word order than English since, pragmatically speaking, it is a more topic-prominent language than English and hence allows more freedom to the dynamic process of topicalization. It seems to me, therefore, that although Chinese is certainly an analytical language in the sense that it has little morphological inflection, neither its function words are as important nor its word order as rigid as they have been thought to be. This observation raises the question as to whether the importance of function words and rigidity of word order should be necessary characteristics of an analytical language.

Finally, I wish to make it clear that this paper aimed only to draw attention to the paratactic nature of Chinese as one of the distinctive typological properties that constitute the more general parameter setting of discourse-oriented languages vs. sentence-oriented languages. No final solutions are proposed. The essential problem still remains as to the specific conditions under which connective elements are optional or obligatory. I believe that this is a research
problem which is, or should be, equally interesting and important as the study of anaphoric elements in Chinese.

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NOTES

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1In this paper I adopt the term 'postposition' for what is generally referred to as *localizers* or *locative particles* in Chinese, although I am aware that it is still a controversial issue as to whether Chinese has postpositions or not.

2According to Crystal (1980: 257), 'paratactic' is 'A term used in traditional grammatical analysis, and often found in descriptive linguistic studies, to refer to constructions which are linked solely through juxtaposition and punctuation/in-tonation, and not through the use of conjunctions. Paratactic constructions are opposed to hypotactic ones, where conjunctions are used'. While English, typologically speaking, is a hypotactic language, it shows some paratactic features too. For instance, according to Bloomfield (1961: 185), 'It's ten o'clock, I have to go home' is an example of ordinary parataxis in which a pause-pitch appears between the two constituents, while 'Please come' and 'Yes sir' are instances of close parataxis without a pause-pitch.

3In the word-for-word gloss, the following abbreviations are used: CL=classifier, MOD=modifier marker, NOM=nominalizer, PRT=particle, ASP=aspect marker, and COM=complement marker.

4A characteristic of Chinese is that almost all of its prepositions have evolved from verbs, and many of them still can function as verbs, hence are called 'coverbs'. A similar phenomenon, though, also exists in English where a number of prepositions such as *regarding, concerning, considering, according to*, are verbs in -ing form.

5As Wang (1945) points out, a main reason why connectives are optional in subordinate constructions is that in Chinese the subordinate clause should occur before the main clause. However, this fixed order cannot mark various kinds of semantic or logical relationships between subordinate and main clauses. It is worth mentioning here that, due to the influence of Western languages, the reversed main-subordinate order has already entered into use, though it is still not common.

6In (18) and (19), *de shihou* 'MOD time' in the second parenthesis is actually a modifier marker (*de*) + the head noun (*shihou 'time*) of the preposition phrase. I put it in parenthesis because it is omissible too in both sentences.

7Otherwise, they are easily accounted for by movement analysis, as illustrated by the following two examples:
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(i) Wo yifu xi-le.
   I clothes wash-ASP
   I washed the clothes.

(ii) Yifu wo xi-le.
   clothes I wash-ASP
   I washed the clothes/The clothes I washed.

Here yifu 'clothes' can be analyzed as a preposed object in (i) and a topicalized object in (ii).

8(36') is open to a different analysis as in (i) below:

(i) \[S \emptyset [S [NP Nei-ke shu de yezi ] da ]].

where the TOP position is empty.

9The one-to-two relationship (i.e. (37) to (37') and (37'")) here, due to the absence of overt marking, is a particular feature associated with paratactic languages. In context, however, no ambiguity will arise from (37), although (37') or (37'") is preferred where accuracy is needed.

10It is worth mentioning here, that when the adverbial adjunct is headed by the preposition ziyu 'as for', it cannot occur in a sentence-internal position since that preposition, just like its English equivalent, is used specially to introduce the sentence topic whose regular position is sentence-initial.

11(42) is open to a different analysis where the EC co-indexed with the topic NP is a PP zai nei-kuai tian li 'in that field', as in (40), with the preposition zai 'at' and postposition li 'in' deleted in the process of topicalization.

12A different analysis of (43) might be as in (i) below:

(i) \[S Nei-chang huo [S e xingkui [S [S xiaofangduai lai de kuai ]]]].

where e stands for an empty expletive subject equivalent to the English expletive it.

13About the optionality of such prepositions as ziyu/guangyu/duiyu 'as for/regarding/concerning', Wang, a well-known Chinese historical linguist, once argued that they typically introduce what he called 'relational phrases'(1956). An example he gave is reproduced below:

(i) Hunyin de shiqing wo ziji zuozhu.
   marriage MOD affair I self decide
   As for the affair of marriage, I should decide it myself.

where the underlined NP (note that the counterpart in the English translation is a PP) is a 'relational phrase'. Wang argued that 'What is worthy of special attention is that the relational phrases of this kind do not have to be introduced by prepositions. According to the more recent syntax, it should be Guanyu hunyin de shiqing wo ziji zuozhu "As for the affair of marriage, I should decide it myself." But from the viewpoint of the history of Chinese, guanyu 'as for' had never been used....Even up to now, this kind of relational phrase is still the most common construction used in daily conversation' (1956: 175-76). Another two examples cited by Wang (1956: 176) are:

(ii) Zhe yang de shiqing, Zhongguo ren de jingyan tai duo le.
   this kind MOD thing Chinese people MOD experience too much PRT
   As for this kind of thing, Chinese people have too much experience.

(iii) Zhe shir, wo ye mei you banfa.
   this matter, I too not have solution
   As for this matter, I too do not have a solution.

14In terms of distribution of empty pronouns, a descriptive parameter between 'hot' languages like English and 'cool' languages like Chinese is discussed in Huang (1984: 531):

For example, English may be said to be a 'hot' language because pronouns cannot in general be omitted from grammatical sentences, and the information required to understand each sentence is largely obtainable from what is overtly seen and heard in it. On the other hand, Chinese may be said to be a very 'cool' language in that such pronouns are usually omissible (and are often more naturally omitted) from grammatical sentences, and understanding a sentence requires some work on the reader's or the hearer's part, which may involve inference, context, and knowledge of the world, among other things.
Interestingly enough, the difference between English and Chinese in the way anaphoric elements are used is very similar to the difference between these two languages in the way connective elements are used. Readers are referred to Fan (1984), Lü (1986) and Sheng (1986) for some discussion.

REFERENCES


