

Temporal and conditional clauses in Chinese spoken discourse: A function-based study

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Abstract. It is generally agreed that different categories of adverbial clauses—temporal, conditional, and causal clauses may have their different performances of distribution and functions in different positions as preposed vs. postposed. According to Ford (1993 & 1994) and Wang (1996), temporal and conditional clauses in both English and Chinese tend to occur in the initial position (preposed) while causal ones tend to occur in the final position (postposed). It is assumed that the initial adverbial clauses form pivotal points in the development of talk and present explicit background for material that follows; on the other hand, final adverbial clauses which might result from the interactional need only complete a unit of information without creating discourse-level links or shifts. Though the functions of the information sequences of adverbial clauses in Chinese spoken discourse have been well established in Wang's (1996) dissertation, there're still problems unsolved: what are the differences among the various expressions of adverbial connectors in Chinese under the same category of adverbial clauses in English? For example, we have at least three expressions representing *when*-clause: *dang ... (de shihou)* vs. *zai ... de shihou* vs. *... de shihou* and *if*-clause: *ruguo ... , jiaru ... , ... de hua* for each. Materials are based on 15 texts (about 150-minute spoken discourse data) with 200 temporal and conditional clauses in total (113 vs. 87). This paper found significant differences in distribution among these adverbial connectors under the same category of adverbial clauses, arguing that such linguistic performances in spoken discourse are possibly due to their lexical semantic differences and further result in their different discourse functions.

0. Introduction

Relations between positions as preposed (initial) and postposed and discourse functions of temporal, conditional, and causal adverbials have been done quite a few. The distribution is that temporal and conditional clauses tend to occur before their modified material (preposed/ initial), while causal clauses are more likely to occur after the modifiee (postposed/final). About the functions of initial temporal adverbials in Chinese discourse, Wang (1996) suggests that their functions are mainly "introducing and shifting time reference and/or offering a contrast". The so-called time reference is "a domain of talk which requires management and attention on the part of conversational participants that it can be generic or specific" (Ford, 1993). And thus it can be shifted from generic to specific, or from specific to generic. The other function of initial temporal clause is it can relate to what precedes it

and produce a frame for what follows through contrast. Initial conditional clauses, as proposed by Ford and Thompson (1986), may fall into five types with functions as exploring options, providing polite requests, illustrating, contrasting, and assuming. Haiman (1978) has argued that conditionals have a correlation with topics: “Conditionals, like topics, are given, which constitute the frame of reference with respect to which the main clause is either true or felicitous.” Thus the function of initial conditional clauses can be thought as “creating backgrounds for subsequent utterances and presenting a piece of information as given” (Wang, 1996). Another similar interpretation is from Huang (1996): the Chinese initial conditional clauses have a discourse organizational function since they serve to break the discourse into significant units and to frame the event in the following clause.

Following an ending intonation, postposed adverbial clauses stand for independent units in their own right (Ford, 1993: 102). The Mandarin data suggest that adverbial clauses after recipients have provided some sign of disbelief, lack of understanding or other trouble; often arise in the context of self-editing and the negotiation of understanding between conversationalists (Wang, 1996).

This paper proceeds as follows. In section 1, I’ll offer the overall distribution of Chinese temporal and conditional connectors in different positions as preposed and postposed according to the 15 texts in my corpus. I’ll list all the adverbial connectors found in my data and argue that even representing the same adverbial category, these adverbials are not at equal status in “frequency”. That is, take *when*-clause for example, although there’re three possible expressions as *dang ... (de shihou)* vs. *zai...de shihou* vs. *...de shihou*, their frequencies in Chinese spoken discourse are significantly different. *After*-adverbials as *zhihou/yihou* are much more frequently used in my corpus than *before*-adverbials as *zhiqian/yiqian*. Similar to the situation of *when*-clause, *if*-adverbials such as *ruguo...* vs. *jiaru...* vs. *...dehua* are very different in frequency. Sections 2&3 will give examples of adverbial connectors mentioned above and more detailed discussion on their discourse functions in preposed and postposed positions respectively. And in the final part of this paper, I’ll draw a brief conclusion and offer a semantic study on these adverbial connectors to explain how they differ in the performance of distribution and discourse function.

1. Classifications and Distribution

Consistent with what Wang (1996) had already observed that both temporal and conditional tend to occur initially (91% & 87%), the figures in table 1 add a strong support to such tendency (97% & 88%):

Table 1. Distribution of temporal and conditional clauses by position in my data

position/type	Temporal	Conditional	Total
Initial	110 (97%)	77 (88%)	187 (93%)
Final	3 (3%)	10 (12%)	13 (7%)
Total	113	87	200

Table 2& 3 show the distribution of all the temporal and conditional connectors found in my data so far. Note that for temporal ones, the expression (X)...*de shihou* (here X can be *dang* or *zai*) is almost the only possible one in *when*-clause except *dan...* without *de shihou*; *after*-adverbials (29%) are more frequently used than *before*-adverbials. For conditional ones, *ruguo...* (47%) is the most productive adverbial connector in *if*-clause and ...*de hua* is the second one (34%). Note that we have also combination as *ruguo...de hua* (13%). This means that they are not in complementary distribution. So *ruguo...* & ...*de hua* are the strongest predictors in conditional clauses (47%+34%+13%=94%).

Table 2. Temporal connectors in initial and final positions

connectors/position	Initial	Final	Total
當...(的時候) <i>dang...de (shihou)</i> ‘when’	5	—	5
在...的時候 <i>zai...de shihou</i> ‘when’	5	2	7
...的時候 ... <i>de shihou</i> ‘when’	65 (59%)	1	66
...之前/以前 ... <i>zhiqian/yiqian</i> ‘before’	4 (4%)	—	4
...之後/以後... <i>zhihou/yihou</i> ‘after’	31 (29%)	—	31
直到...的時候 <i>zhi dou...de shihou</i> ‘until’	3	—	3
Total	110	3	113

Table 3. Conditional connectors in initial and final positions

connectors/position	Initial	Final	Total
如果... <i>ruguo...</i> ‘if’	36 (47%)	6	42
如果...的話 <i>ruguo...de hua</i> ‘if’	10 (13%)	2	12
...的話 ... <i>de hua</i> ‘if’	26 (34%)	—	26
假如...的話 <i>jiaru...de hua</i> ‘if’	3	—	3
假設... <i>jiashhe...</i> ‘if’	1	—	1
萬一... <i>wanyi...</i> ‘if’	1	—	1
除了...以外 <i>chule...yiwai</i> ‘besides’	—	2	2
Total	77	11	87

2. Initial Temporal and Conditional Clauses

This section focuses on clauses which are in initial positions (preposed). Under this category two sub-sections are divided as temporal (sec. 2.1) and conditional (sec.2.2).

2.1 Examples and functions of initial temporal clauses

It is generally agreed that the general functions of initial temporal clauses are introducing and shifting time reference, and/or offering a contrast. In the following sections, I'll give some examples of them and explain how they function in discourse. *When*-clause, *before*-clause, and *after*-clause will be mentioned respectively. In *when*-clause, we have *dan...de shihou*, *zai...de shihou*, and ...*de shihou*. We also have *zhi qian/yi qian* in *before*-clause and *zhi hou/yi hou* in *after*-clause. I will not distinguish *zhi* and *yi* in this paper.

2.1.1 *when*-clause

As was shown in Table 2, the expression (X)...*de shihou* (X can be either *dang* or *zai*) always makes a successful prediction when there's a *when*-clause. *de* is a complicated case in Chinese for it can be a relative marker in relative clause, genitive marker preceded by NPs, or even particle in the final position of a sentence. *shihou* represents a spot or period of time. *de* plus *shihou* has become a fixed expression used in *when*-clause. Now consider example (1). Speaker E is complaining about his brother's bad habit. He first introduces a generic time reference by saying "when he is going to sleep at night" and then continues to describe what the bad habit is like:

(1) ...*de shihou* ...*de shihou*

E: .. <F *erqie ta you huai xiguan* F>,
and 3Sg. Poss. bad habit

'And he has a bad habit.'

→ .. *ta wanshang shuei de shihou*,
3Sg. night sleep

'when he is going to sleep at night,'

.. *ta-de yinxiang huoshi dianshi kan-zhe la*,
3Sg.-Poss. stereo or television watch

'his stereo (open) or (he) was watching television,'

.. *jiou ren shuei-le yihou na-ge dongxi haishi kaizhe*.
3Sg. asleep after that thing still open

'Those are still in use even after (he) fell asleep.'

In addition to generic time reference introducing, (X)...*de shihou* can also function as time framing from generic to specific. Speaker C in (2) describes how her colleagues depreciate her question. She first makes a "pre" *keshi* 'but' as a projection and then sets a time frame "when I went to ask" as a background to go on her speech. In (3), the speaker emphasizes it is during her very "specific" period of time that someone helps her. Note that *dang* and *zai* here can be deleted without violating grammaticality or acceptability. Once they are used, sometimes they can replace each other but sometimes they cannot.

(2) 當...*de shihou* *dang* ...*de shihou*

→ C: .. *keshi .. keshi dang uo qiu wen de shihou*,
but but 1Sg. go ask

'But, but when I went to ask,'

.. *tamen dou juede shuo*,
3Pl. all feel say

'all of them felt/thought that,'

.. *zhe jian shi zheme jiandan*,
this Quan. thing/event so simple

'this is so simple,'

.. *ni dou bu zhidou a*.
2Sg. even Neg. know

'You didn't even know that?'

(3) 在...的時候 *zai...de shihou*

→ H: .. *zai uo zuei dichao de shihou,*
1Sg. most down
'when I was in my most difficult time,'
.. *shi ta peizhe uo de.*
be 3Sg. accompany 1Sg.
'It is he who accompanies me.'

2.1.2 before- after -clauses

The syntactic position of *before-after* adverbial connectors in Chinese is different from the one in English: they occur after the subordinate clause rather than the first position of a sentence. Similar case can also be found in Japanese: *maeni* 'before' vs. *atode* 'after'. Such syntactic difference in position, in my opinion, is very important (I'll explain it in section 4). Note that although adverbials like *zhiqian/yiqian* 'before', *zhihou/yihou* 'after' in Chinese have to be preceded by subordinate clauses when there's a *before-after* clause, they can occur independently as pure time adverbs through the process of metaphorical extension to form certain fixed semantics. For example, similar to "before" in English, *yiqian* in initial position means 'in the past'; *zhiqian* in the same position may either mean 'in the past' or 'before certain event'; this certain event is not spoken superficially (or I shall say that this is out of sentence domain but is known/specific to both speakers and hearers through discourse). *yihou* and *zhihou* in initial position are the counterparts of *yiqian* and *zhiqian* and thus have similar behaviors. Though there're slight differences between *zhiqian* and *yiqian*, *zhihou* and *yihou*, I do not make a distinction here because of the limitation of this paper. Now let's see the following examples of *before-after*-clauses. (4) is from the text which talks about the influences that *viagra* may bring to the relation or interaction between two sexes in society. Thus it is not difficult to understand why speaker B in (4) makes a *before*-clause: she not only sets a time frame but also makes a successful topic continuation. This is interesting to see that though this is a temporal adverbial clause, its function is correspondent to what Haiman (1978) has argued: conditionals have a correlation with topics. (5) is a prototypical *after*-clause in Chinese: shifting time reference from generic to specific.

(4) ...之前/以前 *zhiqian/yiqian*

B: .. *keshi zai uo-men nage--*
but 1Pl. (pause filler)
'But when we--'

→ .. *weiergan yao jinkou zhiqian oh,*
viagra be going to import before
'before the *viagra* is being imported,'

.. *zai.. uo-men guojia ye zuo guo bantu de yanjiou ma.*
in 1Pl.-Gen. country too do Perf. indigenous Rel. research
'(we) also had done our indigenous research in our country.'

(5) ...之後/以後 *zhihou/yihou*

→ R: .. *keshi mei xiang-dou sheng le haizi yihou,*
but Neg. think of give birth to Perf. children after
'but (they'll) never think of it that after giving birth to a baby,'

E: @@ [@@]

R: .. *[di-yi-ge bazhang jiushi haizi shan de ho.*
the first one slap is children give
'the first slap (they receive) is given from their children.'

2.2. Examples and functions of initial conditional clauses: *if*-clause

Like initial temporal clauses, the functions of initial conditional clauses are also about framing and backgrounding: the former deals with time, and the later deals with hypotheticality and condition. Basically, there're two main expressions of conditional clauses: *ruguo...*, and *...de hua* (the two connectors together occupy 94 % of conditional clauses). In general, *if*-clauses also prefer to occur in sentence initial position (88%). Here I'll only give examples of *ruguo...*, *ruguo...de hua*, *...de hua* and ignore other adverbial connectors. In (6), speaker A is doing a hypotheticality that if he cannot get up immediately, the recipient can wake him up again.

(6) 如果... *ruguo...*

→ A: .. *zheyang miande uo .. uo ruguo--*
like this in case 1Sg. 1Sg. if
'Like this, in case that I.. if I--'

.. *tuo henjiou bu qilai,*
put off long while Neg. get up
'put it off for a long while (and) didn't get up,'

.. *ni hai keyi zai ba uo wa-qi-lai.*
2Pl. still can again make 1Sg. wake up
'you can try to wake me up again.'

Example (7) is the combination of *ruguo...& ...de hua*. Either one of them can be deleted without influencing the fluency or the semantic interpretation. Such combination is interpreted in this paper that *ruguo* 'if' is a main adverbial connector, *...de hua* acts as a supplement. I would like to say that *ruguo* is more with respect to hypotheticality and *...de hua* is more to do with conditioning. The two cognitive representations are of course not excluded but highly correlated. That is why this expression can be found in Chinese discourse with not few cases.

(7) 如果...的話 *ruguo...de hua*

→ B: .. *ruguo .. ruguo bijiao chili de hua*
if if more exhausting
'If it is more exhausting (to you),'

jiou xie shi mian jiou hao le.
then write ten pages then all right
'then writing only ten pages will be all right.'

de hua is more complicated than *ruguo*. In (8A), the function of *de hua* can be interpreted as either offering a hypotheticality or posing a possible condition for the following prediction. This will not make any difference if we replace *de hua* by adding *ruguo* in the initial position of this sentence: *ruguo ni zai zheyang xiaqiu (de hua)*. However, consider the example (8B) I made. It is with no doubt that we can have NP preceding *de hua* as a topic introducing which is comprehended as “for NP”. But this usage will never be allowed for *ruguo* no matter it is following or preceding a NP. This discrepancy leads me to believe while *de hua* is a neutral expression, *ruguo* is more with respect to “kinesis” and “agency”, and this idea happens to support my previous claim that *ruguo* is a marker of hypotheticality dealing with certain “event”, *de hua* has less degree of hypotheticality but has more to do with conditioning and if it is after *ruguo*, it can be taken as a supplement.

(8) ...的話 ...*de hua*

A) C: .. *ni zai zheyang xiaqiu de hua,*
 2Sg. still like this go on
 ‘If you keep on (behaving) this way,’
ta jiou zhende bu huei zai li ni le.
 3Sg. then really Neg. may again heed 2Sg.
 ‘he will not be with you anymore, really.’

B) i) *uo de hua, u-fa jieshou.*
 1Sg. Neg.-way accept
 ‘For me, I cannot accept it.’

ii) **uo ruguo/*ruguo uo, u-fa jieshou.*
 1Sg. Neg.-way accept
 ‘For me, I cannot accept it.’

3. Final Temporal and Conditional Clauses

By Wang’s (1996) explanation, the functions of final adverbial clauses are self-editing and the negotiation of understanding between interlocutors. Huang (1995) claims that these self-editing PCEs (Post Completion Extension) are “produced possibly as a strategy to forestall interactional trouble, or to structure information”. While there’re 12% conditional clauses occurring in final position, only 3% temporal clauses occur in final position. Such discrepancy occurs because, in my opinion, we seldom have problems or disagreements on “time” reference. The time flow may change with the change of information flow, and they always match to each other. However, it is “time” that temporal clauses deal with, and so we’ll have very little chance to use temporal clauses as a strategy to forestall interactional troubles. On the other hand, conditional clauses can be related to persons or any kind of events, and thus they are more likely to be taken as a post completion extension. In this section I would like to show how these adverbials behave and function in final position.

3. 1. Example and functions of final temporal clauses: *when*-clause

Speaker H in (9) adds a temporal clause just after posing a question with a falling tone. He narrows the time span by saying *zai nake shihou* ‘at that moment’ and then does a self-repair by saying *gang fenshou de shihou* to make the time reference more specific. It is not only setting a time reference like other temporal clauses in initial position always do but also forestalling a possible interactional trouble.

(9) 在...的時候 *zai...de shihou*

H: .. *keshi ni-de xin you-mei-you ruanhua neh,*
 but 2Sg.-Poss. heart yes-not-yes soften Ques.
 ‘But was your heart softened?’

→ .. *zai nake shihou,*
 at that moment
 ... <A *gang fenshou de shihou* A>.
 just break up
 ‘at the moment that (you two) just broke up.’

3. 2. Examples and functions of final conditional clauses: *if*-clause

In example (10), speaker E is complaining about his brother’s girl friend who washes her clothes even in his house. V then says *hai-hao la* ‘that’s not so bad actually’ in order to soothe E. However, E seems not satisfied with V’s reaction. V realizes it and then immediately adds a conditional clause to weaken his argument and further to avoid any oral disagreement. The postposed conditional clause is produced across different speakers: speaker V makes a post completion for speaker E. Of course, we also have examples of final conditional clauses accomplished within the same speaker’s turn. (11) is the case. Again, similar to what has been mentioned in (9), final conditional clauses may also have functions of framing and self-editing. Speaker A asks a question first and restricts it as “for-one-person” case. Feeling inappropriate, he then adds more detailed description to enhance the recipient’s understanding.

(10) 如果... *ruguo...*

A) E: .. (Hx) .. *ranhou yifu. tongtong zai zhebian xi.*
 then clothes all at here wash
 ‘And then the clothes, (she) washes them all over here.’

V: ...*hai-hou la.*
 not so bad
 ‘It is not so bad actually.’

E: .. (H) .. *gao-bu-chingchu.*
 make-Neg.-clear
 ‘(She) didn’t quite get it.’

→ V: .. *ruguo mei-you=. yian-zhong ganrao-dao ni.*
 if Neg. seriously disturb 2Sg.
 ‘If it is not disturbing you seriously.’

(11) 如果...的話 *ruguo...de hua*

A: .. *na pingchang..pingchang.. zeme xiunlian tamen.*
usual usual how train 3Pl.

‘How (do you) give training to them usually?’

→ .. *dagai yige ren .. ruguo shuo yao neng-gou you*
probably one person if being able to Exist.
zhe-yang-zi .. zhaoshi biaooyian de hua.
like this trick perform

‘probably (for) one person; if he can perform a trick like this.’

4. Discussion

This paper tempts to study how the temporal and conditional adverbial connectors are distributed in frequency and functioned in preposed vs. postposed positions, arguing that these differences we found so far do not come up with no reasons but have a lot to do with lexical semantics. First, by checking 113 temporal and 87 conditional clauses, it is concluded that temporal clauses always occur in sentence initial position (97%), and conditional clauses also have a high tendency to occur initially (88%), showing a modifier-modified sequence. In section 2, we see how the connectors under temporal and conditional clauses are distributed in Chinese discourse. When there’s a *when*-clause, the expression (X)...*de shihou* (here X can be *dang* or *zai*) is almost the only possible one except *dan...* without *de shihou*. *After*-adverbials are more frequently used than *before*-adverbials. For conditional clauses, *ruguo* & ...*de hua* will be the strongest predictors (94%). In section 3, we see how these adverbial connectors behave and function in discourse. The general functions of initial temporal clauses are setting or shifting time reference, and the ones of initial conditional clauses are creating backgrounds for subsequent utterances—framing. Temporal clauses deal with time, and conditional clauses deal with hypotheticality. On the other hand, the postposed adverbial clauses function very differently from preposed ones. Generally speaking, they are post-completion-extensions, functioning as self-editing for interactional needs.

Now, turn to the question posed in this paper: if now we are convinced that we have more than three expressions representing *when*- and *if*- clauses for each and only some of them are the preferred/predominant ones, how do these discrepancies come from? Note that the conditional connectors listed in table 3 by my data, I have to confess, do not include all the possibilities in Chinese. That is, unlike English, Chinese has abundant conditional adverbial connectors, and even there is a slight distinction between “colloquial” and “literary” usages. (It is so complicated that I cannot make it explicit in this paper.) Also recall that we have much more *after*-clauses than *before*-clauses. The following discussion is thus divided into three parts and focuses on lexical study: *dan* and *zai* for *when*-clause; *ruguo* and *de hua* for *if*-clause plus a preliminary study on conditional adverbials *jiaru*, *jiashen*, *wanyi*; *zhiqian/yiqian* vs. *zhihou/yihou* for *before-after* clause.

A. *when*-clause:

Now return to examples (2) & (3) and examine the grammaticality if we replace *dang* with *zai* and *zai* with *dang*: it is absolutely not acceptable/grammatical in (i) but in (ii), though not as good as the original sentence, it is still acceptable. In addition, if we delete *dang* and *zai* in both examples and leave *de shihou* only, it is still perfect in (ii) but not so appropriate for (i). These slight differences, in my opinion, might due to the features within the lexicon. Table 4 is my assumption toward the expression *de shihou*, *dang*, and *zai* on their occurrences with the ideas of time shift, time span, and characteristics of verbs which they correlate. Here I would like to suggest that the expression ...*de shihou* is the underlying representation of *when*-clause in Chinese spoken discourse. *dang* and *zai* are used only when the speaker tempts to narrow the time span and thus makes a time shift from generic to specific. *dang* can be taken as a spot in time span and more related to “event”, and thus it will be perfect when it is used in (i) and still acceptable in (ii). *zai* is used to define a certain period of time and more related to “state”, and thus it is not acceptable in (i).

i) ** *keshi .. keshi zai uo qiu wen de shihou*,
 but but 1Sg. go ask
 ‘But, but when I went to ask,’

ii) ? *dang uo zuei dichao de shihou*,
 1Sg. most down
 ‘when I was in my most difficult time,’

Table 4. *dang*, *zai*, and *de shihou*

Adverbials	time span	time shift	related verbal features
<i>dang...</i> (<i>de shihou</i>)	spot	from generic to specific	high transitivity: active, volitional,... => event
<i>zai...de shihou</i>	a period	from generic to specific	low transitivity: stative, less-agentive,... => state
()... <i>de shihou</i>	flexible	from generic to specific from specific to generic	no restriction

B. *if*-clause:

Recall that in section 2.2 we got a brief conclusion that *ruguo* is a real marker of hypotheticality dealing with certain “event”, *de hua* has less degree of hypotheticality but has more to do with conditioning and if it is after *ruguo*, it can be taken as a supplement. Here I would like to give an introduction to other possible conditional adverbial connectors found in my corpus. *ruguo*, *jiaru*, *jiashen*, *wanyi* will be examined in the following sentences to see their degree of grammaticality/acceptability. The expression in bold is the preferred one. (12) in English is a counter-factual sentence (though there’s no syntactic representation of counter-factual in Chinese, it is obtained through discourse). Here *jiaru* is the perfect use while *ruguo* is comparatively inappropriate but still acceptable. Speaker in (13) is making a

notion of time flow: it is more natural if we mention A first then B by sequence; the inversion of time sequence is not so natural but serves the function of topic continuity. In English, it can have two representations: "A before B" or "after A, B" to fit this time sequence. However, there's only one device in Chinese "A zhihou/yihou, B" and that's why we have much more *after*-clauses in discourse superficially.

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