

# IS THERE TP IN MANDARIN CHINESE?

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This paper shows that Lin's (2003, 2006) argument that Mandarin Chinese has not TP is fallacious in logic, and hence is invalid. It is pointed out that some of his analyses are based on semantic rules and principles and also hold in languages like English. As a result, if MC doesn't have TP simply because those rules and principles may help to derive the temporal interpretations of MC sentences without recourse to the function of T, English shouldn't have TP as well, since those rules and principles apply to English too. Thus Lin's (2003, 200) analyses are based on a wrong assumption: T in English determines the temporal interpretation of sentences. The contrary is more correct; that is, the choice of tense in English is determined by those semantic rules and principle.

## 1. Introduction

This paper tries to evaluate the possibility for the syntactic category TP (Tense Phrase) in Mandarin Chinese (henceforth MC). In a sense this paper is a response to Lin (2003, 2006), who challenges the idea of TP in MC. Lin (2003, 2006) investigates the temporal interpretations of various types of MC sentences, showing that they can be obtained by certain semantic or pragmatic rules without recourse to the functions of TP. As a result, Lin concludes, the existence of TP in MC is yet to be justified: "...challenging work remains for those who have claimed that Tense Phrase is projected in Chinese phrase structures" (Lin 2003: 259). In this paper, however, I will show that Lin's (2003) challenge is based on fallacious logic, and therefore isn't valid. The point is very simple: all the rules resorted to in Lin's (2003) are general rules applicable English as well, though English is a language with TP. If Lin's logic is correct, English shouldn't have TP, contrary to fact.

## 2. Temporal interpretation and TP

Essentially, Lin's (2003, 2006) problem lies in confusing TP as a *syntactic object* with its *semantic effects*. The strategy that Lin (2003, 2006) employs is first to show that the temporal interpretation of a particular syntactic construction in MC can be obtained without assuming a direct semantic effect from TP, and then to contend that there is no reason to assume that TP exists in the phrase structures of MC. This strategy, however, is logically fallacious in at least two ways. First, TP as a syntactic projection, and its semantic effects, can be different matters. It is possible that TP serves syntactic functions which have

no direct bearing on semantics. The EPP requirement is a good example. In current grammatical theory the EPP requirement, namely a sentence has an (overt) subject, is considered a property of T (see Chomsky (1995) for example). The general opinion is that this function of T has nothing to do with the semantics of T.<sup>1</sup> Therefore, the case that the semantic effect of T cannot be the only purpose for its existence. The second fallacy of Lin's (2003, 2006) strategy is his position that if the semantic effects of TP are not detected, TP has no reason to exist in a language. Partee (1973) has pointed out that in English, if a sentence contains a temporal adverbial, the tense of the sentence is redundant. But obviously such redundancy doesn't constitute a reason to assume that TP doesn't exist in English - TP does exist in English, a linguistic fact that has nothing to do with such redundancy.

Related to this problem is Lin's claim that the temporal interpretations of MC sentences can be obtained on the basis of certain semantic/pragmatic assumptions and rules. Since TP doesn't need to be resorted to, Lin (2003, 2006) concludes that TP doesn't need to exist in MC. However, Lin (2003, 2006) tries to count on assumptions and rules that are independently motivated in grammar and therefore are not language-specific. The problem with this is obvious. If one concludes that TP doesn't need to exist in MC (and therefore it doesn't exist) based on these semantic/pragmatic assumptions and rules, and, if these assumptions and rule are equally applicable to a language like English since they are cross-linguistically valid, one may also conclude that TP doesn't need to exist in English. But surely English has TP, contrary to the prediction of Lin's (2003, 2006) logic.

This problem can be illustrated by examining Lin's analyses of the temporal interpretations of MC sentences. In what follows I will cite some examples from Lin's (2003, 2006) analyses and show that those assumptions and rules are equally applicable to English.<sup>2</sup>

### 3. Temporal reference of bare sentences

Lin (2003) observes that the following two sets of sentences have different temporal interpretations ((5a-b) and (6a-b), Lin 2003: 262-267):

- (1) a. Ta   dapuo   yi-ge   hua   ping  
       he   break one-CL flower vase  
       'He broke a flower vase.'

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<sup>1</sup> See Landou (2006) for different approaches to the EPP.

<sup>2</sup> A note is in order here. This section isn't meant to provide a detailed and comprehensive critique of Lin's (2003, 2006) analyses. Such work is beyond the scope of this paper and in fact is not necessary for our purposes. Lin (2003, 2006) are rich in content, and some of the analyses presented are insightful and deserve further exploration; e.g. the discussion of the semantics of the various aspectual markers in MC. The problem lies in the overall presentation and the logic that underlies it. This is why this paper focuses on this problem and omits discussion of other potential problems of Lin (2003, 2006).

- b. Ta ba wo gang-chu jiaoshi  
 he BA me drive-out classroom  
 'He drove me out of the classroom.'
- (2) a. Ta hen congming  
 he very clever  
 'He is very clever.'
- b. Wo xiangxin ni  
 I believe you  
 'I believe you.'

(1a-b) are most naturally understood as past, while (2a-b) present. Why is there such a distinction, as both sets of sentences are bare without any overt temporal modifier or aspectual elements? Lin (2003) points out that a crucial difference between (1a-b) and (2a-b) is that the former set of sentences describe perfective telic situations, whereas the latter set of sentences, imperfective atelic situations. Lin (2003) then proposes to follow de Swart (1998), Schmitt (2000), and Bohnemeyer and Swift (2001), and assume (3a-b) as the default assignment rules for temporal reference ((7a-b), Lin 2003: 264):<sup>3</sup>

- (3) a. Covert present tense must select imperfective AspP as its complement.  
 b. Covert past tense must select perfective AspP as its complement.

According to Lin (2003), (3a-b) gives us the following results: (1a-b) denote perfective telic situations, hence (3b) applies, yielding the past reading; on the other hand, (2a-b) denote imperfective atelic situations, thus (3a) applies, yielding the present reading. In this way, the temporal interpretations of bare sentences such as (1-2) are obtained correctly; there is no need to refer to TP. Lin (2003) puts it in this way: "I conclude that bare sentences provide no evidence for the projection of TP because with or without covert tenses, one can equally predict the temporal locations of eventualities denoted by them."

It is easy to show that English follows the rules in (3a-b) too. It is well known that eventive predicates in English cannot take simple present tense (see Bach 1981 among many others). Consider the following examples:

- (4) a. John built / #builds a house.  
 b. John was / #is forced to move out of his apartment.
- (5) a. John is / was smart.  
 b. John believes / believed Mary.

The reason for the awkwardness of the present forms in (4a-b) is that simple present tense is stative in nature and thus is incompatible with eventive predicates. (Bach 1981). This is in effect what is stated in (3b). Thus the acceptable and unacceptable tense forms in (4a-b) parallel with the temporal

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<sup>3</sup> In Lin's (2003) words, these are selection restrictions on temporal reference. See Lin (2006) for detailed definitions and applications of these rules.

interpretation of (1a-b). Notice, however, that non-eventive predicates in English can take simple present as well as simple past. This doesn't seem to be in complete parallelism with the temporal interpretations of the sentences in (2a-b), which are present by default. But notice the keyword "default" - it is possible to show that in (5a-b), the present tense form is the default case, while the past form is the marked case. To illustrate this, consider someone whose name is John. Suppose John has been smart since he was born. In such a situation *John is smart* is perfectly acceptable, even though the state of John's being smart covers the past and the present. One doesn't have to say things like *John was smart and John is smart* for such a broad coverage of time. On the other hand, if one says *John was smart*, then most likely John is not smart any more at the present time (though it is not necessarily the case; but according to the Gricean maxims, if John was smart and he is still smart, then the most natural way to put it is to say *John is smart*, rather than *John was smart*). In this sense, for a stative predicate like being smart, the present tense is the default tense, as it covers the present time and the past time by default. All this indicates that (3a) holds in English as well. Thus the case of English and that of MC are in complete agreement with respect to the application of the rules in (3a-b). If one infers on the basis of (1-3) that TP doesn't need to exist in MC, one has to say the same for English, though the fact is that English has TP.

#### 4. Temporal reference of relative clauses

Lin (2003) also discusses the way that the temporal interpretation of a relative clause is determined. See the following sentence for example ((41a), Lin 2003: 285):

- (6) Ta mai-le Zhangsan xie de shu  
 he buy-ASP Zhangsan write REL book  
 'He bought a book/books that Zhangsan wrote.'

Lin (2003) notes that the writing event necessarily precedes the buying event, and it also necessarily precedes the speech time. How is this determined? Lin (2003) accounts for this interpretation by means of meaning postulates. A particular thing can be bought only after it comes into existence, and, also, a book comes into existence only after the writing event is finished. The following two meaning postulates capture these intuitions ((51) and (52), Lin 2003: 289). ( $\tau$ : the function that yields the run time of an event;  $f_{\text{target}}$ : the function that yields the target state of an event;  $><$ : the abutting relation.)

- (7) a. Meaning postulate of *mai* 'buy':  
 $\forall x \forall y \forall e [\text{buy}'(x)(y)(e) \rightarrow \exists e' [\text{EXIST}(x)(e') \wedge \tau(e) \subseteq \tau(e')]]$   
 b.  $\|\text{write}\| = \lambda x \lambda y \lambda e \exists e' [\text{write}(x)(y)(e) \wedge \text{Exist}(x)(e') \wedge e' = f_{\text{target}}(e) \wedge e' >< e]$

Lin (2003) proposes that the verbal suffix *-le* is an event realization operator (also see Liu (1988) and Klein et al. (2000)). When it is suffixed to a telic verb,

it yields a past reading. Thus (6) has a past interpretation, since its main verb *mai* ‘buy’ is a telic verb and is suffixed with *-le*. Now (7a-b) guarantees that the writing event precedes the buying event - for someone to buy a book, the book must have been in the state of existence; for a book to be in the state of existence, the writing even must have been finished. And, since the buying event precedes the speech time (due in part to the function of *-le*), the writing event must precede the speech time. In this way the temporal interpretation of the relative clause in (6) is determined.

As a comparison, look at (8), in which the future modal *hui* ‘will’ occurs:

- (8) Ta hui mai Zhangsan xie de shu  
 he will buy Zhangsan write REL book  
 ‘He will buy the book that Zhangsan writes / wrote.’

Due to the function of *hui* ‘will’, the buying event is now located in the future. But the writing event still has to precede the buying event. However, the writing event doesn’t have to precede the speech time in this case. *Hui* ‘will’ locates the buying event to the future; as a consequence, the writing event can be past, present, or future relative to the speech time, as long as it precedes the buying event. Thus (7a-b) successfully account for the temporal interpretations of the relative clauses in (6) and (8).

Now consider the case of English. It is clear that English is also constrained by meaning postulates of (7a-b) sort. (9) is the English counterpart of (6):

- (9) He bought the book [that John wrote / #writes]

The conformity of English to the meaning postulates in (7a-b) is seen in the acceptable and unacceptable tenses in (9): past tense is acceptable, whereas present tense is semantically unacceptable. This is completely parallel to the temporal interpretation of (6). (10) is the English counterpart of (8). Once again we see a parallelism: the writing event in (10) can be past, present, or future, as long as it precedes the buying event.

- (10) He will buy the book [that John is going to write / is writing / wrote].

Lin (2003) comments: “All of these [the determination of the temporal reference of relative clauses in MC] suggest that temporal interpretation of a relative clause does not depend upon the existence of a tense node in phrase structure.” This is not only true of MC: it is true of English as well. But does this mean that English doesn’t have TP? Of course not.

## 5. Tense sequencing

Lin (2006) compares English and MC in terms of the phenomena of tense sequencing. It is known that in English, when a past-tensed clause is complemented to a verb which is also past-tensed, ambiguity may arise:

- (11) John said that Mary was pregnant  
 (i)  $e_{pregnant} < e_{say}$  (The backward-shift reading)  
 (ii)  $e_{pregnant} = e_{say}$  (The simultaneous reading)

But many researchers notice that such ambiguity only arises when the embedded predicate is stative (see Lin (2006) for relevant references). If the embedded predicate is eventive, only the backward-shift reading is possible.

- (12) John said that Mary arrived.  
 (i)  $e_{arrive} < e_{say}$   
 (ii)  $*e_{arrive} = e_{say}$

Lin (2006) adopts Portner's (2003) analysis and assumes the following two rules for tense sequencing in English (see (54), Lin 2006:30):

- (13) For any tenseless clause  $\phi$ , reference time  $r$ , and event  $e$ ,  
 (i) if  $\phi$  is not stative:  $\|\phi\|^{r,e}$  implies that  $e$  precedes  $r$ ; and  
 (ii) if  $\phi$  is stative:  $\|\phi\|^{r,e}$  implies that  $e$  either precedes or overlaps  $r$ .

On the other hand, Lin (2006) observes that MC doesn't show the tense-sequencing effect. In particular, Lin points out that the following MC sentence assumes the simultaneous reading as *the default reading*:

- (14) Zhangsan shuo Lisi hen jinzhang.  
 Zhangsan say Lisi very nervous  
 'Zhangsan said that Lisi was nervous.'

Lin's (2006) explanation of the simultaneous reading of MC sentences like (14) is essentially based on the semantics of the verb *shuo* 'say'. In effect, Lin proposes that when someone says something, the uttered statement must be (considered) true by the speaker at the time of the speaking event (see the logical formulae (55) and (56) in Lin (2006)). Because of this, the topic time of the embedded clause in (14) is identified as the time of the speaking event, yielding the simultaneous reading.

Though Lin (2006) says that the simultaneous reading is the default reading for sentences like (14), it is by no means the only reading. Lin (2006) explicitly points out that given an appropriate context, a sentence like (14) can be construed in such a way that the time of the embedded clause precedes that of the matrix clause. See the following example for illustration. The underlined portion is identical to (14).

- (15) Zhangsan gaosu women Lisi shangge xingqi  
 Zhangsan tell us Lisi last week  
 kaoshi.  
 take-examination

Zhangsan shuo Lisi hen jinzhang, suoyi mei  
 Zhangsan say Lisi very nervous so haven't  
 kao-hao.  
 examine-well  
 'Zhangsan told us that Lisi took an exam last week. Zhangsan said  
 that Lisi was nervous, so he didn't do well with the exam.'

In (15), the time of the saying event is distinct from the time of Lisi's being nervous; in particular, the latter must precede the former. Thus, even though the default reading of (14) is the simultaneous reading, the back-shift reading is also permissible. Here is the point. If we replace the predicate of the embedded clause in (14) by an eventive predicate, we find that the resulting sentence only permits the backshift reading; the simultaneous reading is impossible *regardless of the context*.

- (16) Zhangsan shuo Lisi da-po liang-kuai boli.  
 Zhangsan say Lisi hit-break two-CL glass  
 'Zhangsan said that Lisi broke two pieces of glass.'
- (i)  $e_{breaking} < e_{saying}$   
 (ii)  $*e_{breaking} = e_{saying}$

This is exactly the same as the English example (12). There is really no substantial difference between the case of MC and that of English. In other words, the stative/eventive contrast with respect to tense sequencing is seen in English and MC alike. The only difference is that English employs inflectional morphology to spell out the resulting tense, while MC realizes this contrast by means of permissible and impermissible readings. All this has nothing to do with whether MC has TP or not.

## 6. Conclusion

In conclusion, Lin (2003, 2006) doesn't really prove that MC has no TP. He only illustrates that it is possible to derive the temporal references of different types of MC sentences without reference to the semantic function of TP. But the problem with this approach is that, it is not really the case that the temporal references of English sentences are determined by the semantic function of TP. The contrary appears to be more correct: the tense morphology of an English sentence, to a great extent, is determined by various semantic/pragmatic factors. In view of this fact, Lin's (2003, 2006) argument loses its validity, since according to Lin's logic, English wouldn't need tense, either. But English has TP. So why is it that MC doesn't have TP just because the temporal interpretations of MC sentences can be derived from semantic/pragmatic factors?

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