

# When Time is a Fact: A Semantic and Time-Relational Analysis of ‘*You + VP*’ in Taiwan Mandarin

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## Abstract

The aim of this study is to investigate the semantic value of the auxiliary *you* in Taiwan Mandarin. This auxiliary has long been viewed as denoting perfectivity (Tsai, 2002), while recent analyses argue that it could also be a past tense (Chen, 2010) or a realis marker (Liu, 2011). However, none of these analyses is completely satisfactory, as they can’t account for some data. Therefore, the main proposal is to argue that the core meaning of *you* in ‘*you + VP*’ is that it is a factual marker, asserting the trueness of the described situation. Along with this analysis, a time-relational one (Klein, 1994) is also proposed to explain the different temporal interpretations of ‘*you + VP*’.

## 1 Introduction

The aim of this study is to characterize the semantic value of the auxiliary *you* in Taiwan Mandarin, as it can be found in (1).

(1) wo            you            zuo   meng  
    1SG           YOU           do   dream  
    ‘I dreamt; I made a dream’

This auxiliary has often been viewed as displaying temporal properties. Some scholars analyzed ‘*you + VP*’ as an aspectual perfective marker (Tang, 1994; Shi and Li, 2001; Tsai, 2002), while others treated it as a past tense marker (Chen, 2010; Cai, 2011). Still under a framework of time, ‘*you + VP*’ has also been said to belong to the modal category, as a realis marker (Wen, 2002; Liu, 2011).

What will be shown is that these descriptions are both too narrow, because they exclude some patterns in which ‘*you + VP*’ is involved, and too wide, involving vague definitions. Therefore, we aim to show that ‘*you + VP*’ is best described with

semantic terms, as a factual marker. We will also show that this analysis can include the temporal properties of ‘*you + VP*’.

This paper is organized as follows:

- First of all, we will review the different accounts for the auxiliary *you* in Taiwan Mandarin, and show why they are not satisfactory;
- Then, we will propose a semantic analysis of *you* in ‘*you + VP*’ as a factual marker, able to account for all the data. Arguments to support this analysis will also be provided;
- Finally, we will show that our analysis can include the temporal properties of ‘*you + VP*’, and therefore we will propose a time-relational representation for the auxiliary *you*, using Klein’s (1994; 2000) framework.

## 2 Literature review

In this section, the different accounts for *you* in the literature will be introduced. Each of them will be discussed, putting a light on their inadequacies.

### 2.1 *You* as a perfective marker

Maybe the most common analysis for the auxiliary *you* is to see it as a perfective marker. In that way, *you* is often compared with the aspectual verbal particle *le*.

Tsai (2002) argues that *you* is used to denote an event that is terminated or completed. For him, the differences between *you* and its so-called counterpart *le* would come from pragmatic uses; unlike *le*, *you* can be used to emphasize the termination/completion of the event.

Using the same analysis as in Shi and Li (2001) and other scholars, Tsai also demonstrates that *you* and *le* can be compared, taking negative sentences as an argument. The morpheme *mei* is used to negate completed events. Therefore, it is used to negate *le* as well as *you*, in (2) and (3).

(2) ta xinqitian xi-le yifu  
 3SG Sunday wash-PERF clothes  
 ‘He washed the clothes on Sunday’

(3) ta xinqitian mei-you xi yifu  
 3SG Sunday NEG-YOU wash clothes  
 ‘He didn’t wash the clothes on Sunday’

Besides the arguments of the interpretations of *you*, and the occurrence of *you* in the negation of a completed event, a third one is proposed in favor of the analysis of *you* as a perfective marker. For Cai (2011), *you* seems not to be allowed in a sentence in which *le* is involved, like in (4).

(4) ?ta xinqitian you xi-le yifu  
 3SG Sunday YOU wash-PERF clothes  
 Intended: ‘He washed the clothes on Sunday’

After having searched for the structure ‘you + VP’ in different corpora, Cai (2011) haven’t found any instance of sentences involving *you* and *le* at the same time. Therefore, following the Economy Principle, she concluded that these two elements can’t occur in the same sentence because they denote the same concept.

However, the analysis of *you* as a perfective marker can’t be satisfactory. For conceptual reasons, directly comparing the aspectual interpretations of *you* and of *le* seems too risky. Indeed, a same interpretation can come from different factors. Therefore, concluding that *you* and *le* belong to the same aspectual category according to their interpretation isn’t convincing.

Another argument against *you* as a perfective marker can be proposed, once we take a look at its interaction with imperfective (progressive and durative) markers. In Mandarin Chinese, perfective and imperfective markers can’t appear in a same sentence, as in (5).

(5) \*ta zai zuo-le dangao  
 3SG PROG make-PERF cake

But such a sentence with the auxiliary ‘you’ works well.

(6) ta you zai zuo dangao  
 3SG YOU PROG make cake  
 ‘He is making a cake’

If *you* is a perfective marker, how can the acceptability of example (6) be explained, while example (5) is ungrammatical? Besides, (6) doesn’t have a perfective interpretation.

Therefore, even if *you* can have a termination/completion interpretation just like

perfective markers in Mandarin Chinese, it is not always the case. Even more, it can occur with imperfective markers. Then, analyzing *you* as a perfective aspect is not satisfactory, because it is too narrow.

## 2.2 *You* as a past tense marker

Another way to analyze ‘*you* + VP’ is to view this auxiliary as a past tense marker. Claiming so would mean that the event modified by *you* is shifted to a past time reference. Chen (2010) makes this claim after having remarked that *you* can’t occur in a future time reference sentence, as in (7).

(7) #ta mingtian you xi yifu  
 3SG tomorrow YOU wash clothes  
 ‘\*He washed the clothes tomorrow’

One could say that *you* doesn’t necessarily shift the event to the past, if we keep sentence (6) in mind. Indeed, the reference time of this sentence is present. Chen (2010) is aware of this, and thus compares ‘*you* + VP’ with the present perfect in English. For the two structures, the event is located in the past, but still has consequences on the present, hence a present time reference interpretation at the end. According to Chen (2010), the sentence in (6) must be interpreted as follows: the event of [make a cake] is in the past, but it hasn’t come to an end, thus the use of the progressive marker, which blocks the past time interpretation.

Cai (2011) gives a related explanation, while she claims that *you* is a past tense marker. She remarks that ‘*you* + VP’ can also indicate a habit, which has a present time reference interpretation, as in (8).

(8) wo you chou yan  
 1SG YOU take out smoke  
 ‘I smoke; I have the habit of smoking’

She also discovered that in this case, the verbs selected by *you* are activity verbs, which means that they are considered as [-TELIC]. But as for a habit, it must have begun in the past. Therefore, her analysis is as follows: the auxiliary *you* shifts the situation in the past, and for her, the present time interpretation would be due to the situation type that doesn’t have end boundaries.

Yet, the analysis of *you* as a past tense marker isn’t satisfactory. Typologically, Mandarin Chinese is said to be a tenseless language (Klein, 1994; Smith, 1997), even if it is still a hot issue. Claiming that *you* is a past tense marker that has been grammaticalized is very challenging from this point of view.

Conceptually, it suffers from inadequacies. If it is a past tense marker, such as the ones we can find in Indo-European languages, why isn't it obligatory in sentences with past time adverbials for an agreement operation?

Another point to underline is that both Chen (2010) and Cai (2011) conclude that *you* is a past tense marker, mainly because of two facts: sentences like (7) are unacceptable, and no occurrence of *you* in a future time reference is found in the corpora they based their research on. Yet, it seems too risky to conclude that *you* can't occur in future time reference sentences on this basis. Furthermore, if we search for 'you + VP' in other corpora, it is possible to find the auxiliary *you* in sentences with a clear future time adverb, like in (9).

(9) ta mingtian you yao kan dianying  
3SG tmrw YOU PROSP watch movie  
'He will watch a movie tomorrow'

In this case, the time adverb first agrees with the verb, which then receives an aspectual feature with *yao*. This phrase finally falls under the scope of *you*. Even if it isn't a direct agreement between *you* and the future time adverb, they can still co-occur in a same sentence. Furthermore, if *you* were a past tense marker, and assuming that *mingtian* is in the scope of *you*, then we should expect a *future in the past* interpretation, which is not the case.

### 2.3 You as a realis marker

A third analysis that has been proposed for the auxiliary *you* is to consider it as a realis modality marker. The main focus wouldn't be to know if the event is terminated/completed or located in the past, but to know if the situation can be considered as belonging to the real world (Elliott, 2000).

Several arguments are presented in favor of this analysis. A lot of researchers agree on the fact that the structure 'you + VP' is related to the verb *you* itself, 'to have'. This verb can also be used to denote the existence of an object or an entity (Tsai, 2002). Therefore, it is conceptually plausible that the auxiliary *you*, selecting a verb describing a particular event, is used to assert the existence of this event (Liu, 2011).

Other semantic arguments are given by scholars claiming that *you* is a realis marker. Wen (2002) says that *you* is better compared with what she calls the irrealis marker *hui*, and asserts that these two auxiliaries are complementarily distributed. As a

matter of fact, Mandarin Chinese allows several modal auxiliaries in a sentence (see (9)). Yet, *you* and *hui* can't occur together (10).

(10) \*wo you hui zuo meng  
1SG YOU IRR do dream

Moreover, the auxiliary *you* can't appear in imperative mood sentences, nor in the apodosis of conditional sentences, as Liu (2011) claims:

(11) \*如果我肚子餓，我有吃蘋果。

\*If I am hungry, I have eaten apples.

These evidence for a realis marker analysis are conceptually stronger than the two previous views. However, it suffers from theoretical considerations. What is realis in languages? In fact, the validity of this category is still in debate, since what is encoded as realis in one language can be seen as irrealis in another language (Elliott, 2000). Then, even if the arguments of Wen (2002) and Liu (2011) are convincing, the definition of *you* as a realis marker isn't satisfactory. Moreover, as Liu (2011) analyzes *you* as realis, she also claims that future tense is incompatible with this auxiliary. Then, such a view is also challenged by the sentence in (9).

## 3 A semantic analysis: You as a factual marker

As we just argued, none of the previous analyses are completely satisfactory. In turn, we propose in this part to consider the auxiliary *you* as a factual marker, meaning that the situation asserted by *you* is presupposed as being true by the speaker.

### 3.1 You and future time reference

One of the main argument that is given in the three previous analyses is that *you* seems not to appear in future time reference sentences, as in (7). However, the problem of these analyses is that none of them can account for the sentence in (9).

We believe that a clear definition of futurity is needed. Following Gosselin (2005), futurity can be divided in several kinds of future time, such as posteriority, future tense, and others. This analysis of futurity will be discussed in this part, to account for the two sentences in (7) and (9) in our analysis of *you* as a factual marker.

For the sentence in (7), since there aren't any aspectual markers, only the time adverbial *mingtian* anchors the sentence, in regards with the reference time. The reference time is clearly located after the

speech time. In other words, the situation described by the verb can only be imagined, or hypothesized. Hence, for a simple clause as the one in (7), there is no way to assert the situation as something factual or actualized. To support this idea, the perfective *le* can't occur in such a simple clause.

(12) #ta mingtian xi-le yifu  
3SG tmrw wash-PERF clothes

If one analyzes *you* as asserting a factual situation, such a sentence with a hypothetical/imagined future event can't be asserted by this auxiliary. Then (7) is naturally unacceptable.

Another kind of futurity is linked with a planned situation, the prospective aspect (Gosselin, 2005). As it is planned, it is located in the future. Yet, the speech time and the reference time interact more with each other in this case. More precisely, as the situation is something planned, we can predict when it will begin. Therefore, this kind of futurity can be seen as a prospective futurity, in which the beginning boundary of the situation time is linked to the end boundary of speech time (Gosselin, 2005). Hence, the situation belongs in part to a factual assertion, due to the proximity of the two boundaries. In Mandarin Chinese, the auxiliary *yao*, when it denotes futurity, has been viewed as a prospective auxiliary more than a future tense marker (Chen and Saillard, 2011).

From this analysis, and ours of *you* as a factual marker, we can predict that a sentence in which both *you* and *yao* are found is acceptable. This is the case with the sentence (9). It also works with sentences involving verbs denoting a planned future, as *dasuan*, 'to plan'. It can be noted that (9) and (13) share the same scope interpretation.

(13) ta mingnian you dasuan qu Meiguo  
3SG next year YOU plan go USA  
'He has planned to go to the USA next year'

Sentences with the auxiliary *you* also work well with simple clauses in which a verb allows to look ahead in the future, just like the prospective aspect.

(14) yiren mingtian you lu jiemu  
artist tmrw YOU record TV program  
'The artist will record a TV program tomorrow'

On a surface level, sentence (14) is similar to the one in (7). But they differ in the way that the verbs describe different situations. In (14), there are pragmatic reasons to think that it is part of the profession of an artist to record TV programs. But from one's world knowledge, such an activity

requires an agreement between two parts, so that the record of the program is planned, and not only something that is imagined to happen. Then, the situation can be seen as factual under this view, and is totally compatible with the auxiliary *you*.

### 3.2 *You* in non-factual environments

Claiming that the auxiliary *you* is a factual marker implies that it can't occur in non-factual environments. Concerning this type of environment, we can take two of them as representative ones: conditional clauses and counterfactual clauses.

The most representative pattern of the conditional clauses is the "if... then..." pattern. This pattern is composed of two parts: the protasis and the apodosis. The conditions are introduced in the protasis, and the consequences of these conditions are uttered in the apodosis. If we look closely at this type of structure with factuality in mind, we can think that the protasis can be factual, whereas the apodosis cannot. Indeed, the protasis expresses only conditions, and states that they may be true or not, factual or not factual, depending on the polarity of this clause. Yet, the apodosis is a matter of the consequences of the conditions expressed in the first clause. In other words, what is uttered is the hypothetical consequences of the factuality or the non-factuality of the conditions. Therefore, the apodosis is non-factual, while the protasis can be factual or not.

This analysis can catch the ungrammaticality of the sentence proposed by Liu (2011) in (11). Interestingly, '*you* + VP' is acceptable in the protasis clause of the conditional structure.

One may argue that '*you* + VP' doesn't denote factuality, but anteriority of an event according to another one. This could explain why *you* couldn't be found in the second part of the conditional clauses. Yet, the auxiliary *you* can indeed occur in the second clause, asserting a situation that happened after the one in the first clause, like in (15). In this sentence, *you* is asserting a posterior event. Therefore, the factuality of the situation seems to be more relevant than the order of the situations.

(15) 因為我弟在蘋果商店排了一整個下午的隊，  
所以他有買到新手機。

My little brother succeeded in buying the new smartphone, because he queued up the whole afternoon.

Besides the conditional clauses, counterfactual clauses are also said to denote non-factuality. One of them in Mandarin Chinese is the pattern ‘*chadian* + VP’, ‘to be close to the point/almost’ (Shyu and Chuang, 2015). In this structure, a situation has begun in the past, but its result described by the verb has not been reached, even if it is lexically encoded. Consequently, this pattern can also be seen as a non-factuality/counterfactuality. Under this view, we can predict that ‘*you* + VP’ can’t occur with *chadian*.

(16) ta chadian (\*you) da-shang gongche  
 3SG almost (\*YOU) take-up bus  
 ‘He almost caught the bus’

The sentence in (16) is acceptable without *you*, but is ungrammatical with this auxiliary. But the same sentence with *you* only works well. Then we can conclude that it is the non-factuality of the situation due to the counterfactual marker *chadian* that makes the impossibility of the occurrence of *you*.

#### 4 You as a factual marker: consequences on the time representation

##### 4.1 Link between factuality and previous analyses of *you*

The point of analyzing the auxiliary *you* as a factual marker isn’t to exclude previous analyses. On the contrary, our analysis can take them into account. Lyons (1977) argues that in some ways, past tense is the product of factuality. Since factual events have a clear tendency to have already happened, the link between past time and factuality is also clear. Perfective is also highly linked with past tense (Smith, 1997), and with factuality by extension.

Therefore, the point here is to claim that previous analyses of ‘*you* + VP’ aren’t considered as wrong, but not satisfactory enough. Analyzing *you* as a factual marker is not only more in line with data involving this auxiliary, but it is powerful enough to catch the past and perfective interpretations on the one hand, and to account the possible uses of imperfectivity and planned future time reference on the other hand, since they can agree with a factual marker.

##### 4.2 A time-relational representation of *you*

Thus, the way the auxiliary *you* asserts a situation with its corresponding time can be represented with a time-relational framework (Klein, 1994; Klein et al., 2000). For Klein, time can be defined in terms

of relations between three time spans: Topic Time (TT), Time of Utterance (TU) and the Time of Situation (T-SIT). They are related with operators, such as BEFORE, AFTER, OVERLAP, and so on. Under his view, what relates the TT to the TU is what we call tense; what relates the TT to the T-Sit is a more internal time, or aspect. What linguistic devices assert in time can be computed, making the definitions of their temporal properties clearer.

Concerning *you*, it has been previously shown that tense isn’t a relevant feature concerning *you*’s time assertion, since it can be used with both past time and future time reference. Therefore, the relation doesn’t involve the TU in its core properties.

On the contrary, the situation described by the verb is more dominant, and thus the T-Sit. Then, the proposed representation for *you* is the one in (17).

(17) TT OVERLAP pretime of T-SIT

Several remarks have to be made. First, it seems similar to the one proposed for the perfective *le* in Klein et al. (2000), which is given in (18) (adapted for the comparison).

(18) TT OVERLAP pretime of T-SIT and T-SIT

Yet, they differ in the way the one in (17) doesn’t expressly asserts the target phase of the T-Sit, but only its pretime. This analysis has at least two consequences. As it is similar to the one of *le*, it is not surprising that *you* and *le* can be confound. The second one is that since only the pretime of T-Sit is involved with *you*, the situation doesn’t need to be bounded. Therefore, unbounded situations can be predicted, such as the cooccurrence of *you* and imperfective markers and the habit interpretation in (6) and (8). It can also explain why sentences involving *you* and *le* can be odd. From their time representation, *le* has a wider scope than *you*. Therefore, when *you* selects an event already specified by *le*, it can’t entirely ‘catch’ the denoted event.

Some questions remain. First, why is the auxiliary *you* highly related with past time interpretation? We believe that it can be the consequence of TT asserting the pretime of T-SIT, implying that TT is before T-SIT, as for *le* (Klein et al., 2000:759). With the overlap, the TT fixates on the T-SIT in some ways. Yet, it doesn’t specify that TT must be before TU. The factuality of the situation also plays a crucial role on the past time interpretation.

The second question is about the difference between *you* and the prospective aspect. The representation of this aspect by Klein (1994) is given in (19).

(19) TT BEFORE T-SIT

Following Gosselin (2005) and Chen and Saillard (2011), this relation can be even further analyzed: the boundaries of the two time spans can be seen as very close, with a possible representation in (20).

(20) TT JUST BEFORE T-SIT

Then, the difference between the prospective aspect *yao* and *you* is that *you* asserts the pretime of T-SIT. Under this analysis, *you*'s temporal scope is wider than *yao*'s. Therefore, *you* can select a phrase already specified by *yao* (as in (9)) without making it odd. In addition, the interpretation of a sentence involving the prospective aspect would be slightly different when the auxiliary *you* is present or not. Since it is a factual marker, asserting the pretime of T-SIT, a feeling of confirmation would be added to the sentence with *you*. It turns out to be the case, since some scholars also analyzed *you* as confirming the situation (Tsai, 2002).

## 5 Conclusion

After having reviewed previous analyses of the 'you + VP' in Taiwan Mandarin, we argued that none of them can be fully satisfactory. In return, we proposed another view for this auxiliary, considering it as a factual marker. This analysis is able to account for all the data concerning 'you + VP', and to catch the different readings of *you* at the same time. Therefore, we also proposed a time-relational analysis to explain the perfective, prospective, past tense and habit readings of *you*. Further questions remain. If we believe that *you* is better analyzed with semantic terms, it could be helpful for deeper analysis to represent it with formal semantic terms. In addition, we can remark that *you* is optional in the past time. Then, what are the pragmatic needs for *you* to be used by the speakers? Finally, what seems relevant for *you* is the situation described by the verb in factual environments. It would be interesting to test with empirical methods whether *you* needs the verb to process the sentence in which it is involved or not.

## References

Cai, Y. (2011). *Syntax and semantics of you + VP in Taiwan Mandarin* (Master thesis). National Chengchi University, Taipei.

- Chen, Y. (2010, June). *The temporal and aspectual properties of the "you+VP" construction in Mandarin Chinese* (Master thesis). Chinese University of Hong Kong, Hong Kong.
- Chen, X., & Saillard, C. (2011). Prospective aspect in Mandarin Chinese, on the aspectual value of modals *yào* and *huì*. In *XVIth Conference of the European Association of Chinese Linguistics*.
- Elliott, J. R., & et al. (2000). Realis and irrealis: Forms and concepts of the grammaticalization of reality. *Linguistic Typology*, 4(1), 55–90.
- Gosselin, L. (2005). *Temporalité et modalité* (De Boeck Supérieur). Brussels.
- Klein, W. (1994). *Time in language*. Psychology Press.
- Klein, W. (2009). How time is encoded. In *The expression of time* (Vol. 3, pp. 1–43).
- Klein, W., Li, P., & Hendricks, H. (2000). Aspect and Assertion in Mandarin Chinese. *Language & Linguistic Theory*, 18(4), 723–770.
- Liu, C.-T. (2011). Motivations for Grammaticalization: A Case Study of the Realis Marker YOU (有) in Taiwan Mandarin. In *The 12th Chinese Lexical Semantics Workshop (CLSW-12)*.
- Lyons, J. (1977). *Semantics*, Vol. 2. Cambridge University Press, Cambridge.
- Shi, Y., & Li, N. (2000). Diachronic Syntactic Changes and Negative Forms in Modern Mandarin – Grammaticalization of the negative marker 'mei (you)'. *Yuyan Yanjiu*, (2), 39-62.
- Shyu, S., & Chuang, Y.-C. (2015). Approximating to the Event Boundary, (Counter)Factuality and Approximative Cha(yi)dian. In *Analyzing Language as Material* (Ming-Yu Tseng). The Center for the Humanities at National Sun Yat-sen University.
- Smith, C. (1997). The parameter of aspect. 2nd. *Netherlands: Kluwer Academic Publishers*.
- Tang, T. (1994). *Chinese Syntax and Morphology* (Vol. 5). Taipei: Xuesheng
- Tsai, W (Dylan). (2002). "You 'have' in Taiwan Mandarin and Dialects". *National Tsing Hua University Journal*. 2(32): 495-528.
- Wen, H. (2002). You'(y) avoir' grammatical dans le mandarin de Taïwan. *Cahiers de Linguistique-Asie Orientale*, 31(2), 279–292.