

Occurrence of Event and Locative Subjects in Mandarin Chinese*

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Abstract

In this paper I investigate the sentence *Wang Mien si-le fuqin* ‘(lit.) Wang Mien died father’ (‘Wang Mien had his father die’), which is an intriguing sentence in Mandarin Chinese that has received much attention from researchers of Mandarin Chinese grammar. I argue that the generation of this sentence crucially depends on the function of the light verb OCCUR, which denotes occurrence of an event and introduces a locative subject. Thus the intransitive verb *si* ‘die’ is used in a “transitive” way in this sentence because it permits a locative subject. According to this analysis, then, the subject of the sentence *Wang Mien* is a locative expression. This analysis not only accounts for the “transitive” uses of the verb *si* ‘die’ but also generalizes to other verbs. This paper shows that OCCUR is compatible only with change-of-state verbs with a resultative state, of which the verb *si* ‘die’ is an instance.

* Acknowledgements to be added.

1. Introduction

This paper focuses on the following sentence:¹

- (1) Wang Mien (qi sui shang) si-le fuqin.
Wang Mien seven year.old on die-PERF father
'(Lit.) Wang Mien died his father (when he was about seven years old)' =
'Wang Mien had his father die (when he was about seven years old).'

This Mandarin Chinese (henceforth MC) sentence originated from an 18th-century satirical novel *Ru-lin Wai-shi* 'Anecdotes of Confucian Intellectuals' (Wu Jingzi, 1701-1754 AD).² It is interesting, in fact intriguing, because the intransitive verb *si* 'die' is being used in a way fairly much like a transitive verb. There have been proposals that try to account for this sentence, but none of them seems to have provided a satisfactory explanation. In this paper I will propose an analysis for this sentence that is different from all earlier theories. Essentially what I am going to argue for is the following:

- The sentence in (1) is in fact a locative-subject sentence.
- The verb *si* 'die' in this sentence can be used in a "transitive" way precisely because it permits a locative subject.
- The subject *Wang Mien* in (1), as a result, is a locative subject.

Lin (2008a) points out that, albeit less known to the researchers, MC is actually a *locative-prominent* language which permits a variety of locative subjects unseen in other languages (also see Lin 2001). In particular, MC has a special type of locative-subject sentence which Lin (2008a) calls the "occurrence" locative-subject construction. According to Lin (2008a), this type of locative-subject sentence denotes occurrence of an event, and the locative subject denotes the location in which the event takes place, or to which the event happens or matters. We argue that the sentence in (1) is such a sentence. The analysis that we propose is that a light verb OCCUR heads the predicate of this type of sentence, which takes the VP projected

¹ The abbreviations used in the glosses are: CL: classifier; DAT: dative case marker; DISP: preposed object disposal marker; DUR: durative aspectual marker; PASS: passive marker; PAST: past morpheme; PERF: perfective aspectual marker; POSS: possessive marker; PRT: sentence-final mood particle.

² A different translation of the title of this novel - actually the more popular one, which nonetheless is less precise than the one provided in the text - is *The Scholars*.

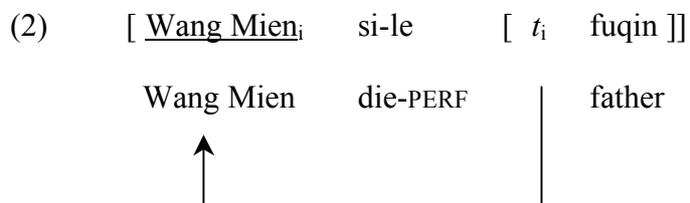
by the lexical verb – in the case of (1), *si* ‘die’ - as complement and a locative expression as specifier (which becomes the subject of the sentence). It will be shown that this analysis has advantages over other analyses, and thus is superior to them.

This paper is organized as follows. Section 2 reviews some of the earlier proposals dealing with (1). Section 3 proposes an analysis of (1) which treats it as a locative-subject sentence. Section 4 discusses some further questions bearing on the sentence (1). Section 5 concludes the paper.

2. Earlier analyses

2.1 Some earlier proposals

The primary question with the sentence (1) is how the verb *si* ‘die’ can be used in a “transitive” way.³ Different analyses have been proposed for this phenomenon. For example, Xu (1999, 2001) and Han (2000) propose that the derivation of the sentence in (1) involves movement of a possessor NP to the subject position:



In this analysis, *si* ‘die’ is taken to be an unaccusative verb with ‘Wang Mien’s father’ as its argument. The possessor NP *Wang Mien* then raises to the matrix subject position yielding the sentence in (1).

A different proposal is the light verb analysis by Zhu (2005). According to this proposal, the verb *si* ‘die’ takes the NP *fuqin* ‘father’ as its argument. The VP that *si* ‘die’ projects is then embedded under the light verb EXPERIENCE, which selects *Wang Mien* as its specifier. The verb *si* ‘die’ then incorporates to EXPERIENCE yielding the surface form of the sentence in (1).

³ We don’t really mean that the verb *si* ‘die’ in (1) is being used as a transitive verb. The term “transitive” here and below is used to refer to the phenomenon only.

- (3) [Wang Mien [EXPERIENCE [fuqin si-le]]]
 Wang Mien father die-PERF
-

Another analysis is that proposed by Pan and Han (2005), who suggest that the verb *si* ‘die’ is being used as an unaccusative verb with its argument *fuqin* ‘father’ staying in-situ (namely in the post-verbal position). The NP *Wang Mien* is a topic NP base-generated in the CP area and therefore doesn’t have a direct bearing on the verb *si* ‘die’. The subject position of the sentence (Spec of TP) is left empty.

- (4) [CP Wang Mien [TP *e* si-le fuqin]]
 Wang Mien die-PERF father

All these theories have their appeals. Shen (2006) presents a thorough review of these analyses and shows that they are problematic in one way or another. For example, the analysis based on the possessor NP movement ((2)) suffers the problem of double case assignment of the possessor NP. The possessor NP has already had a genitive case before movement, but it would get a nominative case after the movement. The analysis that resorts to the light verb EXPERIENCE ((3)) would over-generate unwarranted sentences (see note 7); further, the verb movement to the light verb requires justification. The analysis assuming a base-generated topic in the CP area ((4)) has problems too: it cannot account for the case status of the post-verbal NP *fuqin* ‘father’. According to this analysis, the NP *fuqin* in (4) must have been case-licensed. But if so, the movement of the NP *fuqin* ‘father’ to the matrix subject position in the sentence *Wang Mien, fuqin si-le* ‘Wang Mien, [his] father died.’ would be puzzling, as there is no motivation for the movement.

2.2 “Blending”

Shen (2006) himself proposes an interesting theory for the sentence in (1), which is based on what he calls the “blending” of two different sentence types. Shen observes that the sentence in (1) implies that Wang Mien suffered a great loss. Now consider the verb *diu* ‘lose’. The

verb *diu* ‘lose’ can be used as an intransitive verb as well as a transitive verb; see (5a) and (5b). Shen’s proposal is this: since *si* ‘die’ implies loss, and since *diu* ‘lose’ can be transitive, *si* ‘die’ is then analogized with *diu* ‘lose’ and develops a transitive use, as in (5d) (= (1)).⁴

(5) Blending according to Shen (2006):

- a. Wang Mien de mou-wu diu-le.
 Wang Mien POSS something lose-PERF
 ‘Something possessed by Wang Mien was lost.’
- b. Wang Mien diu-le mou-wu.
 Wang Mien lose-PERF something
 ‘Wang Mien lost something.’
- c. Wang Mien de fuqin si-le.
 Wang Mien POSS father die-PERF
 ‘Wang Mien’s father died.’

⁴ Shen (2006) observes that some other sentences are of the same type as (1), including the following ones (Shen 2006: 291):

- (i) Ta pao-le yi-shen han.
 he run-PERF one-body sweat
 ‘He ran to the extent that he sweated all over his body.’
- (ii) Ta zhang-le ji-fen yongqi.
 he grow-PERF several-amount courage
 ‘He got some courage.’
- (iii) Ta qi-le yi-shen ji-pi geda.
 he grow-PERF one-body chicken-skin pimple
 ‘He got goose pimples all over his body.’

However, these sentences do not involve loss on the part of the subject argument; furthermore, the verbs in these sentences don’t exhibit “intransitive-transitive alternation.” See the following examples:

- (iv) * Ta-de yi-shen han pao le.
 he-POSS one-body sweat run PERF
- (v) * Ta-de ji-fen yongqi zhang le.
 he-POSS several-amount courage grow PERF
- (vi) * Ta-de yi-shen ji-pi geda qi le.
 he-POSS one-body chicken-skin pimple grow PERF

Thus these sentences are not susceptible to Shen’s “blending” analysis. It is unclear why Shen considers them of the same type as (1). Perhaps it is because these sentences involve inalienable possession, which some take to be a defining characteristic of the (1)-kind of sentences, as the analysis in (2). However, we will show in section 4.2 that it is a misconception to regard (inalienable) possession as a defining characteristic of the (1)-kind of sentences. Also see Kliffer 1995.

- d. Wang Mien si-le fuqin. (= Blending of (b) and (c))
 Wang Mien die-PERF father
 ‘Wang had his father die.’

This analysis is interesting, but it doesn’t have explanatory power. It appears that Shen literally means that the sentence in (1) derives from a blending of (5b) and (5c). But the status of such a derivation poses a problem - is it historical or grammatical in nature? The operation of blending as suggested by Shen, in fact, looks more like an explanation for the origin of (1) in history; however, there is no evidence that (1) is indeed historically derived from (5b)+(5c). Furthermore, even if (1) derives from (5b)+(5c) historically, it has no relevance to the grammatical analysis of (1). On the other hand, the derivation (1) = (5b)+(5c) cannot be part of the grammar of MC either. One lesson that we have learned from the history of grammatical theory is that we cannot permit such powerful transformation that derives, say, *John killed Mary* from *John caused Mary to become not alive* (McCawley 1968, Fodor 1970). If so, how could we derive the sentence (1) from (5b)+(5c)? Such a derivation presumes powerful transformations that no grammatical theory would legitimately permit. In this sense, Shen’s (2006) analysis cannot provide a reasonable account for (1) and hence lacks explanatory power.⁵

In fact, what Shen (2006) is trying to say, we suppose, is simply the following statement: the verb *si* ‘die’ in the sentence (1) is nothing but a transitive verb. The so-called derivation

⁵ Roger Liao (personal communication) points out that Shen’s “blending” analysis is empirically problematic as well. Consider the following example:

- (i) Wang Mien de fuqin zai zhangzheng-zhong si-le.
 Wang Mien POSS father at war-in die-PERF
 1. ‘Wang Mien’s father died in the war.’ (e.g. killed as a soldier)
 2. ‘Wang Mien’s father died during the war time.’

The sentence in (i) is ambiguous: it can mean that Wang Mien’s father was a victim of the war, or that Wang Mien’s father died at a certain point of time during the war (the cause of his death unrelated to the war). Now look at the following example:

- (ii) Wang Mien zai zhanzheng-zhong si-le fuqin.
 Wang Mien at war-in die-PERF father
 ‘Wang Mien had his father die during the war time.’

Liao points out that (ii) only has the “war time” reading but not the “victim of the war” reading. If (ii) is generated by blending of (i) with the transitive use of the verb *diu* ‘lose’, the contrast between (i) and (ii) cannot be explained. The contrast between these two sentences indicates that (i) and (ii) most likely have different generation histories, and this is something that the blending approach cannot capture. I am grateful to Roger Liao for this observation.

(1) = (5b)+(5c) could be just a heuristic explanation. This reduces the problem to the lexical ambiguity of the verb *si* ‘die’ and similar verbs. However, if *si* ‘die’ in (1) is simply a transitive verb, then the notion of argument structure loses much of its sense in the research of MC grammar. What is more, the “transitive” use of the verb *si* ‘die’ is not limited to (1). Consider the following sentences:

- (6) Zhan-chang-shang si-le henduo ren.
 war-field-on die-PERF many people.
 ‘(Lit.) On the war field died many people.’
- (7) 1976 nian si-le henduo ren.
 1976 year die-PERF many people
 ‘(Lit.) In the year 1976 died many people.’

(6)-(7) are similar to (1) but the subject arguments are different; in (6) the subject is a locative, and in (7) it is a temporal expression. How are these sentences accounted for? Simply saying that they ((1), (6) and (7)) are all “transitive” is not an explanation. Besides, notice that (6) and (7) don’t carry a sense of loss on the subject argument, hence the formula (1) = (5b)+(5c) doesn’t apply to them. Something important is missed if one adopts the “blending” analysis.

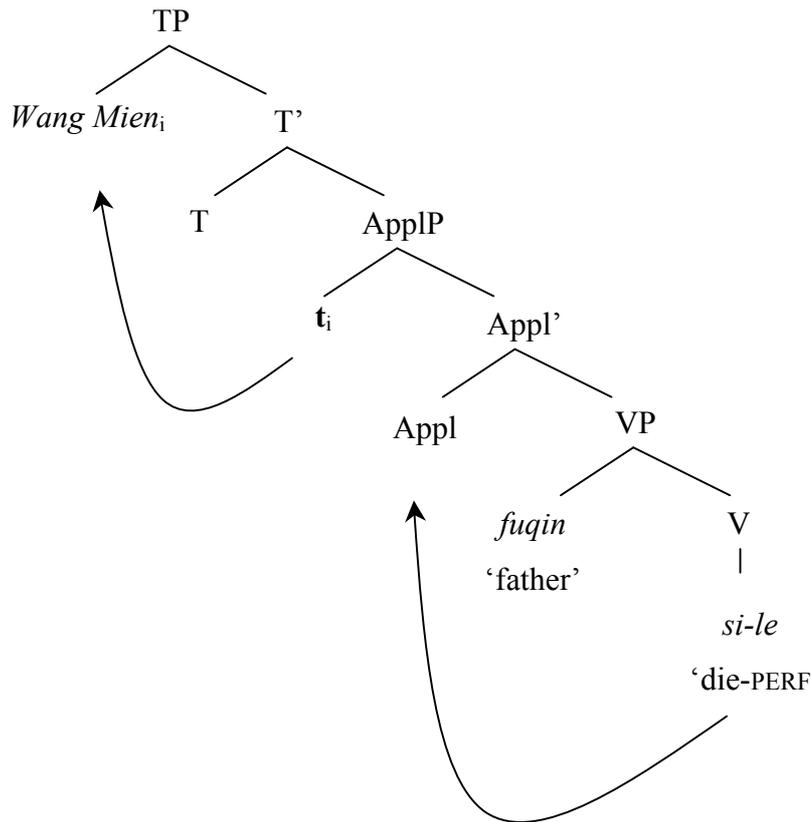
2.3 *The applicatives*

Remember that (1) is intriguing because an additional argument occurs in a sentence whose main verb is an intransitive verb. Viewed from this perspective, Tsai’s (2007) proposal deserves some attention. Tsai (2007) suggests that sentences like (8) are *applicatives*, namely constructions in which an applicative head introduces an additional argument.

- (8) Zhangsan pao-le laopo.
 Zhangsan run-PERF wife
 ‘Zhangsan had his wife run away.’

Now suppose that the sentence in (1) is also an applicative construction. Following Tsai (2007), we may analyze (1) in the way shown in (9):

(9)



Suppose that a phonetically empty applicative head takes the VP that *si* ‘die’ projects as complement and the NP *Wang Mien* as specifier. The verb *si* ‘die’ then incorporates to the applicative head, and the NP *Wang Mien* moves to Spec of TP. This yields the surface structure that we see in (1).

This approach becomes particularly attractive if we look at the applicative constructions in other languages. Pylkkänen (2000) argues that the adversative passive in Japanese is an applicative construction. See the following Japanese example:

- (10) Taroo-ga titioya-ni sin-are-ta.
Taroo-NOM father-DAT die-PASS-PAST
‘Taroo had his father die.’

The MC sentence (1) looks very similar to (10). Thus, in a manner of speaking, the MC sentence (1) could perhaps be regarded as an “adversative passive” with the passive morpheme (actually the applicative head) phonetically empty. An even more striking

example is the case of Finnish. Pylkkänen (2000) gives the following Finnish sentence ((14a), Pylkkänen 2000: 408).⁶

- (11) Eetu-lta kuoli poika.
Eetu-FROM_p died son
'Eetu's son died on him.'

See how similar (1) is to the Finnish sentence (11). Therefore, it seems feasible to analyze (1) as an applicative sentence with an empty applicative head, as Tsai's (2007) and Pylkkänen's (2000) theories would lead one to.

This approach, however, is not without problems. Suppose we take the idea seriously that the sentence in (1) is basically the same as the Japanese adversative passive in (10), with the applicative head phonetically empty. Now, how could we account for the ungrammaticality of the example in (12)?

- (12) *Wang Mien ku-le fuqin.
Wang Mien cry-PERF father
'(Intended) Wang Mien had his father cry.'

The ungrammaticality of (12) poses a problem: why is it ungrammatical?⁷ In the Japanese adversative passive the verb is quite unrestricted and the sentence corresponding to (12) is fully acceptable:

- (13) Taroo-ga titioya-ni nak-are-ta.
Taroo-NOM father-DAT cry-PASS-PAST
'Taroo had his father cry.'

The only way to solve this problem is to ascribe a specific meaning to the applicative head. This seems plausible; Pylkkänen (2000) points out that applicatives in natural languages are often attached with specific meanings. In English the applicative sentence *John bought Mary a drink* has a sense of benefaction; in the Finnish sentence in (11) the applicative has a sense

⁶ The gloss FROM_p stands for the ablative marker meaning 'possessive from'. See Pylkkänen 2000.

⁷ Shen (2006) also observes a similar problem. He takes this problem as evidence against the analysis of (1) based on the light verb EXPERIENCE (see section 2.1).

of deprivation. Suppose that the MC sentence (1) patterns with the Finnish case in (11). The verb *ku* ‘cry’ is not permitted in this construction because it doesn’t yield a sense of deprivation or loss on the subject argument; on the other hand, the verb *si* ‘die’ is permitted because it clearly implies some kind of loss on the subject argument. In this way the ungrammaticality of (12) may be accounted for.

Unfortunately, this solution doesn’t work. The problem, once again, is that the verb *si* ‘die’ can take a locative or temporal subject, as we have seen in (6)-(7), repeated below.

(14) Zhan-chang-shang si-le henduo ren.
 war-field-on die-PERF many people.
 ‘(Lit.) On the war field died many people.’

(15) 1976 nian si-le henduo ren.
 1976 year die-PERF many people
 ‘(Lit.) In the year 1976 died many people.’

In (14)-(15), the subject argument cannot be attributed the sense of deprivation or loss – locative and temporal expressions do not denote sentient beings and hence don’t get deprived or suffer loss. Thus, unless we consider (14)-(15) totally unrelated to (1), the applicative-based approach to (1) cannot be correct.

In conclusion, none of the analyses we saw above provides a satisfactory account for (1). In the next section a different proposal is put forth, which takes (1) as essentially a *locative-subject* sentence.

3. Locative subject and occurrence of an event

3.1 Locative sentences

We claim that (1) is a locative-subject sentence. In particular, the subject NP of the sentence in (1), *Wang Mien*, is a *locative subject*. The motivation for this claim is the following generalization: if a verb can assume the kind of use that *si* ‘die’ does in (1), it can also take a locative subject; conversely, if a verb cannot take a locative subject, it cannot assume the kind of use as *si* ‘die’ in (1). See the following examples for illustration.

- (16) Zhangsan si-le erzi. (si ‘die’)
 Zhangsan die-PERF son
 ‘Zhangsan had his son die.’
- (17) Zhan-chang-shang si-le henduo ren.
 war-field-on die-PERF many people.
 ‘(Lit.) On the war field died many people.’
- (18) Zhangsan pao-le laopo. (pao ‘run, escape’)
 Zhangsan run-PERF wife
 ‘Zhangsan had his wife run away.’
- (19) Jianyu-li pao-le liang-ge fanren.
 jail-in run-PERF two-CL prisoner
 ‘(Lit.) In the jail ran away two prisoners.’
- (20) *Zhangsan ku-le erzi. (ku ‘cry’)
 Zhangsan cry-PERF son
 ‘(Intended) Zhangsan had his son cry.’
- (21) *Wu-li ku-le henduo ren.⁸
 house-in cry-PERF many people
 ‘(Intended) In the house cried many people.’
- (22) *Zhangsan shu-le erzi. (shu ‘lose, fail’)
 Zhangsan lose-PERF son
 ‘(Intended) Zhangsan had his son lose.’
- (23) *Wu-li shu-le henduo ren.
 house-in lose-PERF many people
 ‘(Intended) In the house lost many people.’

In (16)-(17) and (18)-(19), the verbs are *si* ‘die’ and *pao* ‘run, escape’; they can assume the (1)-kind of use, and they can also take a locative subject. In (20)-(21) and (22)-(23), the verbs are *ku* ‘cry’ and *shu* ‘lose’; they cannot assume the (1)-kind of use, and, correlated with this fact, they cannot take a locative subject. More examples can be given. (24)-(26) are some sentences which Shen (2006: 291) observes are of the same type as (1). They can all take a locative subject, as in (27)-(29) (but see note 4).

⁸ If the perfective aspectual marker *-le* in (21) is changed to the durative aspectual marker *-zhe*, the sentence will become better. But in that case the sentence will be a different construction, that is, an EXIST sentence, rather than an OCCUR sentence. See section 4.1 for more details.

- (24) Ta lan-le wu-kuang pingguo.
 he get.rotten-PERF five-basket apple
 ‘He had five baskets of apples rotten.’
- (25) Ta fei-le yi-zhi gezi.
 he fly-PERF one-CL pigeon
 ‘He had a pigeon fly away.’
- (26) Chuanda-shi dao-le yi-mian qiang.
 communication-room fall-PERF one-CL wall
 ‘A wall in the communication room collapsed.’
- (27) Bingxiang-li lan-le yi-dui-de bale.⁹
 refrigerator-in get.rotten-PERF a-lot-of guava
 ‘(Lit.) In the refrigerator were rotten a lot of guavas.’
- (28) Zhangsan-jia-li fei-le yi-zhi jinsique.
 Zhangsan-home-in fly-PERF one-CL canary
 ‘(Lit.) Away from Zhangsan’s home flew a canary.’
- (29) Chuanda-shi-li dao-le yi-mian qiang.
 communication-room-in fall-PERF one-CL wall
 ‘(Lit.) In the communication room collapsed a wall.’

This generalization relates the sentence in (1) to locative-subject sentences. Thus, the verb *si* ‘die’ in (1) can be used in a “transitive” way not because it is really transitive, but because it has the ability to take an extra locative expression as subject. Of course, this by itself doesn’t prove that the subject NP *Wang Mien* in (1) is a locative – *Wang Mien* in (1) looks more like an experiencer than a locative. We will turn to that point later.¹⁰

⁹ Source: <http://school.tjhs.tcc.edu.tw/modules/news/article.php?storyid=357>.

¹⁰ Kliffer (1996) also observes that verbs like *si* ‘die’ can take a locative subject instead of an experiencer subject. But Kliffer doesn’t relate the two together; he only refers to the locative subject as an “alternative possibility.”

3.2 The light verb OCCUR

The above discussions show that in addition to the intransitive use, the verb *si* ‘die’ (and other similar verbs) can assume “transitive” uses taking an NP subject or a locative subject. (They can also take a temporal subject. We will come back to it later.) See the examples below.

- (30) Wang Mien si-le fuqin. (Experiencer subject)
Wang Mien die-PERF father
‘Wang Mien had his father die.’
- (31) Wang Mien jia-li si-le ren (Locative subject)
Wang Mien home-in die-PERF person
‘Someone in Wang Mien’s home died.’

In fact, MC is not the only language that exhibits such alternation. Spanish has similar constructions as well. In Spanish, verbs that denote existence, change of state, or occurrence of events may take a locative subject. See (32)-(34) ((1a), (1b), and (2c), Fernández-Soriano 1999: 103):

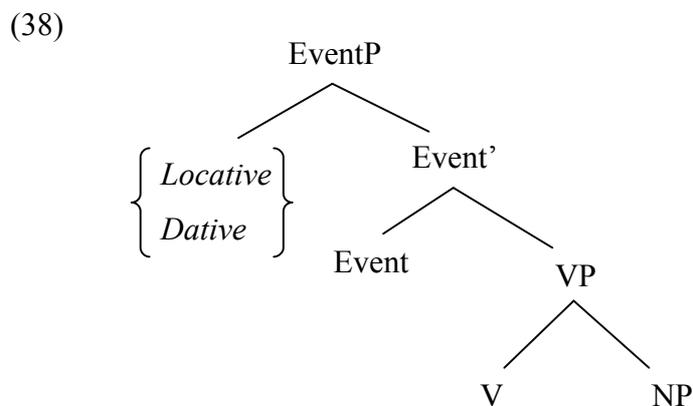
- (32) En este impreso consta que eres el responsable.
in this form states that you-are the responsible
‘In this form it states that you are the responsible one.’
- (33) Aquí falta / sobra café / un vaso.
here misses / is-extra coffee / a glass
‘Coffee / a glass is missing here.’
- (34) En Barcelona ha ocurrido un accidente.
in Barcelona has happened an accident
‘An accident has happened in Barcelona.’

Strikingly, these verbs can take a dative subject too. The dative subject assumes the role of experiencer. See the following example ((30b), (31b), and (32a), Fernández-Soriano 1999: 121):

- (35) Me pasa algo.
 to-me happens something
 ‘Something is happening to me.’
- (36) Me consta que eres el mejor.
 to-me states that you-are the best one
 ‘I am sure that you are the best one.’
- (37) Me falta café.
 to-me misses coffee
 ‘I am missing coffee.’

The Spanish examples in (32)-(34) and (35)-(37) are parallel to the MC examples (30)-(31). In the Spanish examples (32)-(37), the subject is a non-nominative NP, i.e. a *quirky subject*. We may think of the MC examples in (30)-(31) as taking a “semantically quirky subject” as well.

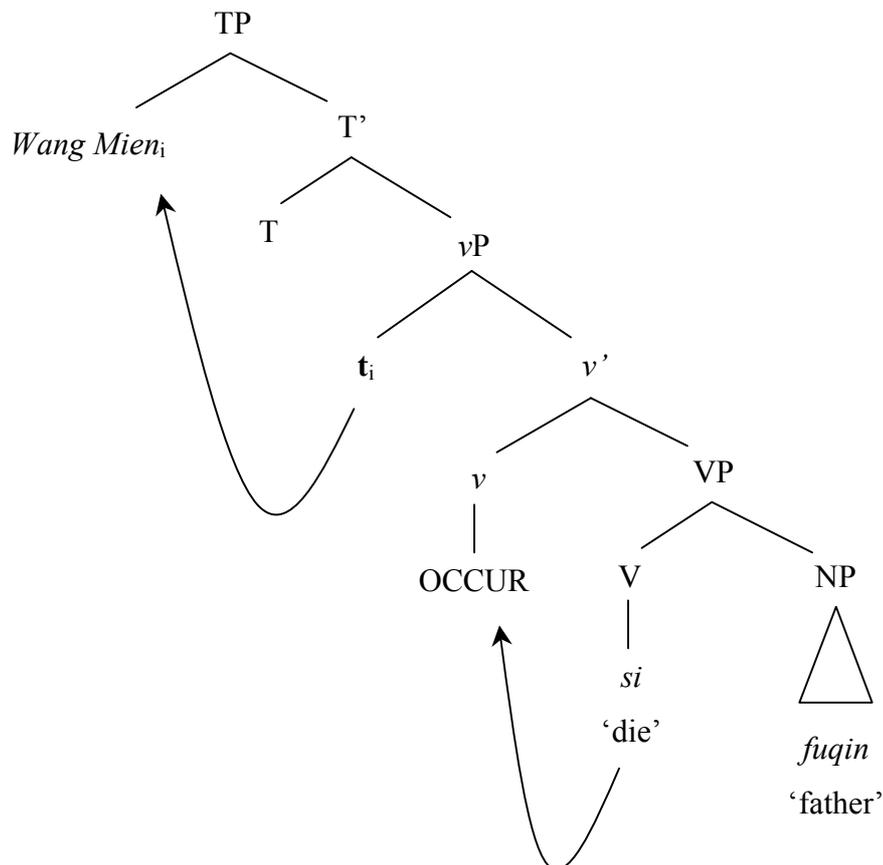
Fernández-Soriano (1999) follows Harley’s (1995) theory (with some changes) and proposes that the quirky subjects in Spanish sentences such as (32)-(37) are licensed by the functional category Event. The head Event can host the event predicate CAUSE, in which case the sentence is agentive; alternatively, the head Event can host the event predicate BECOME or HAPPEN, in which case the sentence is inchoative (denoting change of state).¹¹ In this latter case the head Event may take a locative or dative expression as its specifier. This is the origin of the quirky subjects in sentences like (32)-(37) (see Fernández-Soriano 1999: 128-129).



¹¹ In Harley’s (1995) original theory, an inchoative EventP (headed by the event predicate BE in her theory) doesn’t have a specifier.

Though details may be somewhat different, it appears that the MC sentence in (1) and the Spanish quirky-subject sentences (32)-(37) are of the same kind. Our proposal for (1), therefore, is basically the same as Fernández-Soriano’s (1999) analysis for the Spanish sentences in (32)-(37). Our analysis of (1) is as follows.

(39)



We employ the light verb OCCUR in the structure; for the use of this event predicate, see Huang (1997), Lin (2001), and Lin (2008a) (also see the next section). It is basically the same as HAPPEN in Fernández-Soriano’s (1999) analysis.¹² The light verb OCCUR takes the VP that *si* ‘die’ projects as complement, and it also takes *Wang Mien* as specifier, which becomes the subject of the sentence. Since OCCUR denotes occurrence of an event, the

¹² We do not use the more popular event predicate BECOME because there are complications regarding the type of verbs that may assume the (1)-kind of use. In section 4.3 we will show that only change-of-state verbs with a resultative state may assume the (1)-kind of use; that is, only those verbs are compatible with OCCUR. As a consequence we need to make a distinction between change-of-state verbs with a resultative state and those without. The event predicate BECOME only represents change of state and thus is too gross for our purposes.

sentence in (1), according to the analysis in (39), means “The event of [his] father’s death occurred to Wang Mien.”

The analysis of (1) as shown in (39) has the following advantages. The first advantage is that it accounts for the status of the subject *Wang Mien* and how it comes into the sentence in (1) – it is a *locative* introduced by the light verb OCCUR.

Notice that the semantic role of the subject *Wang Mien* in (1) is an experiencer. What is interesting is that Landau (2005) argues that *experiencers are “mental locatives.”* This claim is not just a metaphorical statement. Landau (2005) points out that experiencers share with locatives many similarities: semantically both the experiencer and the locative denote a location (in the mental space or in the physical world), morphologically they both take oblique case, and syntactically they all undergo “locative inversion” – that is Landau (2005) argues that an object experiencer moves to Spec of TP in LF. If we follow Landau’s (2005) theory, then, even though *Wang Mien* is a proper name and doesn’t look like a locative, it is indeed a locative.¹³ A further advantage that follows is that, now we have a unified account for the subjects that OCCUR licenses. Remember that the verb *si* ‘die’ can take an experiencer, a locative, and a temporal expression as subject; see the examples (1), (6)-(7), and (14)-(15). We repeat the relevant examples here.

- (40) Wang Mien si-le fuqin.
Wang Mien die-PERF father
‘Wang Mien had his father die.’
- (41) Zhan-chang-shang si-le henduo ren.
war-field-on die-PERF many people.
‘(Lit.) On the war field died many people.’
- (42) 1976 nian si-le henduo ren.
1976 year die-PERF many people
‘(Lit.) In the year 1976 died many people.’

¹³ There are actually two possible ways to conceive of the locative nature of the subject *Wang Mien* in (1). First, suppose that the light verb OCCUR assigns a location role to *Wang Mien*. Then *Wang Mien* is a locative subject. There is no question with the locative nature of *Wang Mien*. Second, OCCUR may assign an experiencer role to *Wang Mien*. According to Landau’s theory, an experiencer is a locative. Again, there is no question with the locative nature of the subject *Wang Mien*. Either way, *Wang Mien* is a locative subject in a genuine sense. For this reason we don’t think it is necessary to explicitly pinpoint the semantic role that OCCUR assigns to the subject *Wang Mien* in (1).

- (45) Zuotian pao-le liang-ge fanren. (Temporal subject)
yesterday run-PERF two-CL prisoner
‘Two prisoners ran away yesterday.’
- (46) Zhangsan chen-le liang-sao chuan. (Experiencer subject)
Zhangsan sink-PERF two-CL boat
‘Zhangsan had two of his boats sink.’
- (47) Hai-shang chen-le liang-sao chuan. (Locative subject)
sea-on sink-PERF two-CL boat
‘Two boats sank in the sea.’
- (48) Zuotian chen-le liang-sao chuan. (Temporal subject)
yesterday sink-PERF two-CL boat
‘Two boats sank yesterday.’
- (49) Zhangsan po-le yi-ge huaping (Experiencer subject)
Zhangsan break-PERF one-CL vase
‘Zhangsan had a vase broken.’
- (50) Wu-li po-le yi-shan chuangzi. (Locative subject)
house-in break-PERF one-CL window
‘A window broke in the house.’
- (51) Zuotian po-le yi-shan chuangzi. (Temporal subject)
yesterday break-PERF one-CL window
‘A window broke yesterday.’
- (52) Zhangsan dao-le liang-dong fangzi. (Experiencer subject)
Zhangsan fall-PERF one-CL wall
‘Zhangsan had two of his houses collapse.’
- (53) Zhe-dong wuzi-li dao-le yi-mian qiang. (Locative subject)
this-CL house-in fall-PERF one-CL wall
‘A wall collapsed in this house.’
- (54) Zuotian dao-le yi-mian qiang. (Temporal subject)
yesterday fall-PERF one-CL wall
‘A wall collapsed yesterday.’

These verbs are all change-of-state verbs. In the analysis (39), the light verb OCCUR takes a VP projected by such a verb as complement. The verb *ku* ‘cry’ (cf. (20)-(21)) is not a

change-of-state verb, so it is incompatible with OCCUR; thus it cannot assume the (1)-kind of use.

Notice however that not all change-of-state verbs permit the (1)-kind of use. In the following examples the verbs denote change of state, but they cannot take a locative subject (the verb *shu* ‘lose’ in (22)-(23) belongs to this type as well).

- (55) **Chezhan-li dao-le yi-liang lieche.*
station-in arrive-PERF one-CL train
‘(Intended) A train arrived in the station.’
- (56) **Zhe-chang bisai ying-le liang-ge xuanshou.*
this-CL game win-PERF two-CL player
‘(Intended) two players won in the game.’

The ungrammaticality of (55)-(56) indicates that there are still questions that need to be clarified. We will come back to them in section 4.3.

4. Some further questions

4.1 *Locative subjects in MC*

In this subsection we will go through some details about the locative subjects in MC so as to get a better understanding on the light verb OCCUR.

Lin (2008a) classifies locative subjects in MC into four types: the “canonical” locative subject, the “existential” locative subject, the “occurrence” locative subject, and the “agentive” locative subjects. The following sentences are examples.

- (57) *Chunzi-li lai-le yi-ge moshengren.* (The canonical type)
village-in come-PERF one-CL stranger
‘In the village came a stranger.’
- (58) *Shan-shang gai-le yi-dong xiao muwu.* (The existential type)
mountain-on build-PERF one-CL small cabin
‘A small cabin was built in the mountain.’

- (59) Women chunzi chen-le liang-sao chuan. (The occurrence type)
 our village sink-PERF two-CL boat
 ‘Our village had two boats sink.’
- (60) Zhangsan-de shou-li wo-zhe yi-ba qiang. (The agentive type)
 Zhangsan-POSS hand-in hold-DUR one-CL gun
 ‘Zhangsan is holding a gun in his hand.’

The canonical locative subjects (e.g. (57)) are so named because they correspond to sentences with locative inversion in other languages. The existential locative subject (e.g. (58)) denotes the location where some individual or individuals exist or end up. The occurrence locative subject (e.g. (59)) denotes the location where an event occurs or happens. The agentive locative subject (e.g. (60)) denotes the location at which an event is going on or in progress.

Lin (2008b) argues that these four types of locative subject can be further reduced to two general types: those licensed by the light verb EXIST (the canonical type and the existential type), and those licensed by OCCUR (the occurrence type and the agentive type).¹⁵ Lin (2008a, b) observes three major differences between EXIST and OCCUR. First, the subject of an OCCUR sentence can be phonetically empty, but this is not possible with an EXIST sentence. Compare (62) with (64).

- (61) Hai-shang chen-le liang-sao chuan. (OCCUR)
 sea-on sink-PERF two-CL boat
 ‘Two boats sank in the sea.’
- (62) Chen-le liang-sao chuan le. (OCCUR)
 sin-PERF two-CL boat PRT
 ‘Two boats have sunk.’
- (63) San-shang gai-le yi-dong xiao muwu. (EXIST)
 mountain-on build-PERF one-CL small cabin
 ‘A small cabin was built in the mountain.’
- (64) *Gai-le yi-dong xiao muwu le. (EXIST)
 build-PERF one-CL small cabin PRT
 ‘A small cabin was built.’

¹⁵ Lin (2008a, b) argues that the canonical type of locative subject in MC is not a result of locative inversion, so their correspondence to sentences with locative inversion in other languages is only apparent.

Second, the subject of an OCCUR sentence can be a temporal expression, but this is not possible with the EXIST sentences:

- (65) Zuotian chen-le liang-sao chuan. (OCCUR)
 yesterday sink-PERF two-CL boat
 ‘Two boats sank yesterday.’
- (66) *Zuotian gai-le yi-dong xiao muwu. (EXIST)
 yesterday build-PERF one-CL small cabin
 ‘(Intended) A small cabin was built yesterday.’

Third, for an OCCUR sentence, the location that the locative subject denotes doesn’t have to be the location where the event takes place; it can be the location on which the event exerts a direct impact. But for an EXIST sentence, the locative subject must denote the location where the event takes place. See (67) and (68). In (67) the subject location is ‘our village’. Notice that the main verb of the sentence is *chen* ‘sink’, and we know that boats don’t sink in the land. This sentence, however, doesn’t mean that the two boats mentioned sank in ‘our village’; it means that ‘our village’ is the location where the event of two-boat-sinking exerts a direct impact. Let’s call such locative subject the “impact locus” subject. (68), on the other hand, is unacceptable if we intend the subject ‘our village’ to be an “impact locus” rather than the place where the cabin mentioned was built and exists.

- (67) Women chunzi-li chen-le liang-sao chuan. (OCCUR)
 our village-in sink-PERF two-CL boat
 ‘Two boats sank which were from our village.’
- (68) * Women chunzi-li gai-le yi-dong xiao muwu. (EXIST)
 our village-in build-PERF one-CL small cabin
 ‘A small cabin was built which was from our village.’
 (Assuming that the cabin was built in the mountain.)

These three differences set OCCUR and EXIST apart. Notice that the verb *si* ‘die’ patterns with the OCCUR sentences in all the three aspects. We have already seen that *si*

‘die’ can take a temporal subject (e.g. (42)). The following examples show that *si* ‘die’ can take a phonetically empty subject ((69)) as well as an “impact locus” subject ((70)).¹⁶

(69) Si-le liang-ge ren le.
die-PERF two-CL person PRT.
‘Two people have died.’

(70) Zhangsan-de jia-li si-le liang-ge ren.
Zhangsan-POSS home-in die-PERF two-CL person
‘Two persons died who were from Zhangsan’s family.’
(Assuming that the two people died somewhere else, e.g. in the battle field.)

These examples, once again, indicate that (1) is indeed an OCCUR sentence. Thus our analysis of the MC sentence (1), as shown in (39), is fully justified by empirical evidence from the locative subjects in MC.

4.2 The questions of possession and the sense of loss

In the sentence (1) the subject (*Wang Mien*) and the individual undergoing change of state (*fuqin* ‘father’) are in a relation of inalienable possession. That is, the NP *fuqin* ‘father’ denotes Wang Mien’s father. It cannot be some other people’s father. Notice furthermore that the individual that undergoes change of state cannot be a definite description or a name such as *Lisi*. See (71). In (71) the empty element *pro* stands for the possessor of the NP *fuqin* ‘father’.

(71) Zhangsan_i si-le [*pro*_{i/*j} fuqin] / *Lisi.
Zhangsan die-PERF father Lisi

If we just focus on the sentence in (1), then such inalienable possession may strike one as a salient property. Perhaps this is why some researchers consider it a defining characteristic of the sentence in (1), and propose theories crucially based on it (e.g. (2)).

¹⁶ Li (1990), following Teng (1975), suggests that the phonetically empty subject in sentences like (69) denotes the spatio-temporal setting of the sentence. So it is still a locative subject.

However, now we know that (1) is but one example of a more general paradigm. In addition to the experiencer subject, the verb *si* ‘die’ can also take a locative subject or a temporal subject (e.g. (41)-(42)), (ignoring the case of the phonetically empty subject, e.g. (69)). In the latter two cases there is no possession relation. Thus a possession relation (inalienable or not) cannot be a defining characteristic of the “transitive uses” of the verb *si* ‘die’. What is more, even in the case of the experiencer subject, there doesn’t need to be a possession relation. A *part-whole* relation is acceptable too (Kliffner 1996). See the following examples.

(72) Tamen si-le wu-ge ren. (Part-whole relation)
 they die-PERF five-CL person
 ‘Five people died among them.’

(73) Wu-sao chuan chen-le liang-sao. (Part-whole relation)
 five-CL boat sink-PERF two-CL
 ‘Two boats sank among the five.’

Notice that the subject *Wang Mien* in (1), being an experiencer, is also an *affected* of the event.¹⁷ In fact, possession and part-whole relations are two major grammatical means that the MC grammar employs to express *affectedness*. They are seen in the passive and the disposal constructions too (cf. Li and Thompson 1981). See the following examples:

(74) Juzi bei Zhangsan bo-le pi. (Possession)
 tangerine PASS Zhangsan peel-PERF skin
 ‘The tangerine was peeled off skin by Zhangsan.’

(75) Juzi bei Zhangsan chi-le san-ge. (Part-whole relation)
 tangerine PASS Zhangsan eat-PERF three-CL
 ‘Three of the tangerines were eaten by Zhangsan.’

(76) Zhangsan ba juzi bo-le pi. (Possession)
 Zhangsan DISP tangerine peel-PERF skin
 ‘Zhangsan peeled off the skin of the tangerine.’

¹⁷ Kliffner (1996: 63) says of the subject *Wang Mien* in the sentence (1): “The initial noun [i.e. *Wang Mien*]... is the entity *affected* by what happens to the post-verbal noun [i.e. *fuqin* ‘father’...] [italics by JL].”

- (77) Zhangsan ba juzi chi-le san-ge. (Part-whole relation)
 Zhangsan DISP tangerine eat-PERF three-CL
 ‘Zhangsan ate three of the tangerines.’

So, the ungrammaticality of (71) (with the index *j* or the proper name *Lisi*) results from the failure to adopt the grammatical means provided by the language to express affectedness, hence the failure to clearly show the affectedness of the subject NP. It has no direct bearing on the “transitive uses” of the verb *si* ‘die’. Possession is not part and parcel of the sentence in (1); it is just one of the means to express affectedness in MC sentences.

Similarly, a sense of loss cannot be a defining characteristic of the sentence (1) either. We showed in section 2.1 that Shen (2006) considers the sense of loss on the subject argument an essential part of the sentence in (1). But again, if we take the locative and temporal subjects into consideration, it is clear that a sense of loss is not necessary for the “transitive uses” of the verb *si* ‘die’. Therefore, neither the possession relation nor the sense of loss could be taken as a basis to define or generate the sentence (1). The defining characteristic of (1) is the sense of occurrence of an event, namely the function of OCCUR.¹⁸

4.3 Change-of-state verbs

At the end of section 3.2 we showed that OCCUR takes a VP projected by a change-of-state verb as complement, but we also showed that not all change-of-state verbs are compatible with OCCUR, for instance (55)-(56), repeated below.

- (78) *Chezhan-li dao-le yi-liang lieche.
 station-in arrive-PERF one-CL train
 ‘(Intended) A train arrived in the station.’

¹⁸ One might think that perhaps the sentence (1) as a whole denotes an event adversative to the speaker/hearer (not necessarily to the subject of the sentence). This cannot be correct either. Consider the following sentence, which could express a positive message to the speaker/hearer:

- (i) Zhan-chang-shang si-le henduo diren.
 war-field-on die-PERF many enemy
 ‘(Lit.) On the war field died many enemies.’

- (79) *Zhe-chang bisai ying-le liang-ge shuanshou.
 this game win-PERF two-CL player
 ‘(Intended) two players won in the game.’

We need to account for the ungrammaticality of these examples.

Our proposal is this: OCCUR is only compatible with change-of-state verbs *with a resultative state*. Change-of-state verbs must be distinguished into two types: those with a resultative state and those without. In fact such a distinction has been suggested. Nakajima (2001) argues that verbs that may occur in the locative-inversion construction in English must be those that yield a resultative state (in his own words, “verbs that can occur in the locative construction are restricted to those whose lexical representations contain a headed subeventual structure designating a culminating state...” (Nakajima 2001: 44)). Nakajima (2001) also points out that change-of-state verbs that don’t yield a resultative state cannot occur in the locative-inversion construction, as in the following examples ((9a) and (9b), Nakajima 2001: 47; his (9b) is adopted from Levin 1993: 246).¹⁹

- (80) *On the line are drying a lot of clothes.
 (81) *On the top floor of the skyscraper broke many windows.

Shen (2007) also argues that change-of-state verbs in MC need to be distinguished into those that yield a resultative state and those that are “instant,” i.e. those that yield no resultative state. Shen’s (2007) examples are as follows:

- (82) Zhangsan dao-le shan-ding.
 Zhangsan arrive-PERF mountain-top
 ‘Zhangsan arrived at the top of the mountain.’
 (83) *Zhangsan dao-zhe shan-ding.
 Zhangsan arrive-DUR mountain-top
 ‘(Intended) Zhangsan arrived at the top of the mountain [and kept in such a state].’

¹⁹ Nakajima (2001) calls these verbs “verbs of change of state” (also see Landau 2005). We also use the term “change-of-state verbs,” but we further distinguish those with a resultative state from those without. In this paper we use the term “change-of-state verbs” to cover both subgroups.

Notice that the MC verbs *po* ‘break’ is compatible with OCCUR (e.g. (49)-(51)), even though the English verb *break* is incompatible with locative inversion. This should not pose any problem because words with similar meanings in different languages may belong to different classes and show different properties.

- (84) Da-men kai-le.
 main-gate open-PERF
 ‘The main gate opened.’
- (85) Da-men kai-zhe ne.
 main-gate open-DUR PRT
 ‘The main gate is open [and keeps in that state].’

Shen (2007) uses the suffixation of the durative aspectual marker *-zhe* as a test, which denotes continuation of a (dynamic or static) state. The gist is that if a verb yields a resultative state, then it can be suffixed with the durative marker *-zhe*, which has the function to highlight the continuation of that resultative state. On the other hand, if a verb doesn’t yield a resultative state, it cannot be suffixed with *-zhe*, since there is no state for *-zhe* to highlight. Consider the verbs *dao* ‘arrive’ and *kai* ‘open’. Both verbs can denote change of state, as shown in (82) and (84). (In these two examples the verbs are suffixed with the perfective aspectual marker *-le*, which usually goes with change-of-state verbs.) Now look at (83) and (85). The verb *dao* ‘arrive’ cannot be suffixed with the durative marker *-zhe*; this indicates that *dao* ‘arrive’ doesn’t yield a resultative state. The verb *kai* ‘open’, on the other hand, yields a resultative state, thus it can take the durative marker *-zhe*.

So we have evidence that change-of-state verbs in MC must be distinguished into two types, namely those with a resultative state and those without (the instant change-of-state verbs). We may employ Shen’s (2007) test of the durative marker *-zhe*, and predict that verbs that are compatible with OCCUR (i.e. all verbs that may assume the (1)-kind of use) can take *-zhe*, whereas verbs that are incompatible with OCCUR cannot take *-zhe*. This prediction is partially fulfilled. Look at the following examples.²⁰

- (86) Zhangsan pao-zhe.
 Zhangsan run-DUR
 ‘Zhangsan is running [and keeps in that state].’
- (87) Chuan chen-zhe.
 boat sink-DUR
 ‘The boat is submerged in the water [and keeps in that state].’

²⁰ The verb *dao* ‘fall’ in (89) and the verb *dao* ‘arrive’ in (90) are different words. They have different tones.

- (88) Chuang-boli po-zhe.
window-glass break-DUR
'The glass of the window is broken [and keeps in that state].'
- (89) Shu dao-zhe.
tree fall-DUR.
'The tree lies on the ground [and keeps in that state].'
- (90) *Huoche dao-zhe.
train arrive-DUR
'(Intended) The train is in an arrival state.'
- (91) *Zhangsan ying-zhe.
Zhangsan win-DUR
'(Intended) Zhangsan is in a winning state.'

(86)-(89) show that the verbs *pao* 'run, escape', *chen* 'sink', *po* 'break', and *dao* 'fall' can take *-zhe*; they are also verbs that can assume the (1)-kind of use (see (43)-(54)). (90)-(91) show that the verbs *dao* 'arrive' and *ying* 'win' cannot take *-zhe*; we have seen that they cannot assume the (1)-kind of use. So far the prediction is fine. However, we have problems with the verb *si* 'die': it cannot take the durative marker *-zhe*, contrary to the prediction.

- (92) * Zhangsan si-zhe.
Zhangsan die-DUR
'Zhangsan died [and keeps in that state].'

We showed above that *-zhe* has to be suffixed to a verb with a resultative state. But Shen (2007) points out that there is a further condition for the suffixation of *-zhe*: the state must potentially have an end. If John is running, then when John stops running, the state of running ends. If the glass of a window is in a broken state, then, as long as the glass is replaced, the broken state ceases to exist. It is such "endable" states that *-zhe* applies to. Shen (2007) gives the following examples for illustration ((10a)-(10b), Shen 2007: 51):

- (93) Zhe-jian yifu (hai) xin-zhe ne.
this-CL cloth still new-DUR PRT
'This cloth is (still) new [and keeps in that state].'

- (94) *Zhe-jian yifu (hai) jiu-zhe ne.
 this-CL cloth still old-DUR PRT
 ‘(Intended) This cloth is (still) old [and keeps in that state].’

In our world knowledge, a new thing can stop being new and become old, but an old thing cannot stop being old – it can only get older. The (un)acceptability of (93)-(94) reflects this knowledge. Specifically, (94) is unacceptable because in this example *-zhe* is suffixed to the verb *jiu* ‘old’, which denotes a state that doesn’t end. This results in semantic awkwardness. Now the case of *si* ‘die’ in (92) is exactly the same. The state of death doesn’t have an end. This is why the verb *si* ‘die’ cannot take the durative marker *-zhe*. The ungrammaticality of (92) doesn’t really indicate that *si* ‘die’ yields no resultative state.

We have a different test to show the resultative state of the verb *si* ‘die’. In MC a *zai* ‘at’ PP can be appended to a verb denoting the state that follows from the verb (Tai 1975). See the following examples:²¹

- (95) Zhangsan tiao zai zhuo-shang.
 Zhangsan jump at table-on
 ‘Zhangsan jumped on the table.’
 (The continuing state: Zhangsan being on the table.)
- (96) Zhangsan shui zai chuang-shang.
 Zhangsan sleep at bed-on
 ‘Zhangsan is sleeping in the bed.’
 (The continuing state: Zhangsan being in the bed.)
- (97) Zhangsan xie liang-ge zi zai qiang-shang.
 Zhangsan write two-CL character at wall-on
 ‘Zhangsan wrote two characters on the wall.’
 (The continuing state: the characters being on the wall.)

We can use the *zai* ‘at’ PP as a test. If a change-of-state verb can be appended with a *zai* ‘at’ phrase, then the verb must have a resultative state; on the other hand, if a change-of-state verb

²¹ When a *zai* ‘at’ PP is appended to a verb, it doesn’t require that the verb denote change of state. For example, (96) doesn’t mean that Zhangsan comes to be in the bed following from a previous “not-in-the-bed” state. The point is that the *zai* ‘at’ PP denotes continuation of a state, which may or may not be the result of a change.

cannot be appended with a *zai* ‘at’ PP, then it has no resultative state. Now look at the following examples:

- (98) Zhangsan pao zai waimien duo-zhe, bu gan hui jia.
Zhangsan run at outside hide-DUR not dare return home
‘Zhangsan ran away and stayed outside hiding; [he] dare not go home.’
- (99) Zhangsan si zai chuang-shang.²²
Zhangsan die at bed-on
‘Zhangsan died in the bed.’
- (100) Chuan chen zai hai-li.
Boat sink at sea-in
‘The boat is sunken in the sea.’
- (101) Huaping po zai di-shang.
vase break at ground-on
‘The vase is broken on the ground.’
- (102) Shu dao zai di-shang.
tree fall at ground-on
‘The tree fell on the ground.’
- (103) *Huoche dao zai chezhan-li
train arrive at station-in
‘(Intended) The train arrived at the station.’
- (104) *Zhangsan ying zai yundong-chang-shang.
Zhangsan win at sport-field-on
‘(Intended) Zhangsan won in the sport field.’

Now we see that *si* ‘die’ can take a *zai* ‘at’ PP, along with those verbs that can take *-zhe*; and again, the verbs *dao* ‘arrive’ and *ying* ‘win’ cannot take the *zai* ‘at’ PP. These examples confirm our proposal, that is, only change-of-state verbs with a resultative state are compatible with OCCUR and assume the (1)-kind of use.

²² This sentence in fact is ambiguous; it has a dynamic reading, meaning that Zhangsan’s life ended in the bed; and a static reading, meaning that Zhangsan is in the bed dead. It is the second reading that concerns us here.

5. Conclusion

In this paper I argued that the MC sentence in (1) is a locative-subject sentence. The evidence for this claim is the fact that the verb *si* ‘die’ patterns with verbs that can take a locative/temporal/experiencer subject. It is proposed that a light verb OCCUR is responsible for the sentence in (1): it takes the VP that *si* ‘die’ projects as complement, and licenses a locative expression as specifier. Even though the verb *si* ‘die’ (and other similar verbs) can take a locative subject, a temporal subject, or an experiencer subject, it is argued that these expressions are all locative in a nature. Some further questions were discussed too. First, it is shown that MC has two types of locative subjects, namely those licensed by the light verb EXIST and those licensed by OCCUR. We showed that the subjects that the verb *si* ‘die’ can take are precisely those that the light verb OCCUR licenses. Second, it is shown that the possession relation observed in sentences like (1) actually is just one of the means that MC employs to express affectedness. In other words, possession is not a defining characteristic of sentences like (1). Similarly, the sense of loss is not an essential part of sentences like (1). Finally, we show that it is necessary to make a distinction between two types of change-of-state verbs: those with a resultative state, and those without. It is argued that OCCUR is compatible only with change-of-state verbs with a resultative state.

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