

## Locative Inversion<sup>1</sup> and Aspect Markers *le* and *zhe* in Mandarin Chinese

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Abstract: Bresnan (1994), based on data in English and Chicheŵa, proposes that the discourse function of locative inversion construction (LIC) is presentational focus, in which the referent of the NP 'is introduced or reintroduced on the (part of the) scene referred to by the preposed locative'. Pan (1996) suggests that the discourse function of LIC in Chinese is the same. In this paper, I investigate two different aspect markers *zhe* and *le* in LIC and argue that the different aspect markers occurring in LIC affect the discourse functions of the structure in Chinese. Only with the durative resultative marker *zhe* does the structure express presentational focus. When the perfective aspect marker *le* appears, however, its function is to comment on the scene referred to by the locative (Du, 1999). Evidence for this claim is provided by demonstrating the contrast between LIC with the two different aspect markers. In so doing, I also support the claim that the two aspect markers are fundamentally different, which is against the proposal by Sybesma (1997) where they are both categorized as resultative.

### 1. Introduction

Locative inversion construction (LIC) refers to the structure shown in (1b), where a locative expression precedes the predicate and an existential NP follows it.

- (1) a. A picture was hung on the wall.  
b. On the wall was hung a picture. (Loc+V+NP)

(1b) contrasts with the canonical word order illustrated in (1a), in which the locative expression is in the post-verbal position.

Two of the main issues that previous research on locative inversion has been concerned with are: a) the characteristics of the verbs appearing in LIC; and b) the discourse function of LIC. Regarding the verbs in this structure, even though it is clear that they are not restricted to unaccusative verbs only (Levin, et al, 1995), they do have to

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<sup>1</sup> Locative inversion is used to refer to sentences with a surface Loc+V+NP order in this paper, and it does not necessarily imply that inversion was involved during the derivation.

conform to the following argument structure shown in (2), as proposed by Bresnan (1994):

(2) verb < th loc>  
       |  
       S

(2) demonstrates that ‘Locative Inversion can occur just in case the subject can be interpreted as the argument of which the location, change of location, or direction expressed by the locative argument is predicated---a THEME’. In example (3) below for instance, through the action of sleeping the initial locative serves to locate the inverted NP <a little girl>, and only in such cases can locative inversion occur.

(3) On the bed slept a little girl.

According to Bresnan (1994), locative inversion has a discourse function of presentational focus, in which the referent of the inverted subject is ‘introduced or reintroduced on the (part of the) scene referred to by the preposed locative’. In other words, postverbal NP bears the focus. In example (3), the postverbal NP <a little girl> is introduced on the scene. Therefore, <a little girl> should represent relatively new information compared to the locative (Levin et al, 1995).

Though Chinese locative inversion structure shares some similarities with English, it also displays its own characteristics. First of all, not all the verbs in Chinese locative inversion match the argument structure proposed by Bresnan (1994). Secondly, the aspect markers *le* and *zhe* play an important role in the structure. This paper will first show that some agentive verbs such as *xie* ‘write’ or *yin* ‘print’, etc. can undergo locative inversion as long as they co-occur with the aspect markers *le* or *zhe*. The apparent interchangeability of the two aspect markers in this case seems to support Sybesma’s (1999) proposal that the two are both resultative markers. However, one crucial difference between the two aspect markers is that the agent can appear with *le* in LIC, but cannot appear at all with *zhe*, as pointed out by Pan (1996). Pan (1996) proposes that *zhe* has the function of deleting the agent roles of such verbs because of its stative interpretation. If Sybesma’s proposal that *le* can also stativize is adopted, then it is not clear why *le* cannot delete the agent role in this case. The paper will then explore further the differences between LIC with *le* and LIC with *zhe*, and propose that the different aspect markers occurring in LIC affect its discourse functions: whereas LIC with *zhe* serves as presentational focus, just as the English locative inversion structure does, LIC with *le* serves the function of commenting on the locative. Evidence for this claim comes from the fact that the postverbal NP can be omitted in LIC with *le*, but usually not in LIC with *zhe*. Such differences are derived from the different aspectual meanings between *le* and *zhe*. Following Smith

(1991), I propose that *le* presents a closed event, whereas *zhe* is a resultative stative marker.

The paper is organized as follows: after presenting the basic data and previous analysis in section two, section three explores the differences between LIC with *le* and LIC with *zhe*. It shows that there are two major differences: one is whether to allow the agent to appear optionally, as pointed out by Pan (1996); and the other is whether to allow the postverbal NP to be omitted. The differences between the two lead to the conclusion that the two structures serve different discourse functions, which is discussed in section four. Section five concludes that the differences between the two structures are due to their different aspectual meanings.

## 2. Previous analysis on Chinese agentive verbs in LIC

In Chinese, apart from some verbs such as *lai* ‘come’ and *zhan* ‘stand’ which are often associated with the locative inversion structure, some transitive verbs such as *xie* ‘write’, *fang* ‘put’, or *yin* ‘print’ etc. can also occur in LIC, even though they typically assign an agent role to an argument, as pointed out by Pan (1996). This is exemplified in (4) and (5):

(4) verb < ag th loc >

(5) zhi shang (\*bei) xie zhe yi ge zi  
 paper on PASS write DUR one CLS character  
 ‘On the paper was written a character.’

(4) shows that the argument structure of such verbs does not match what Bresnan (1994) has proposed due to the presence of an agent role. As (5) demonstrates, these verbs can nonetheless occur in LIC in Chinese. In addition, if the verb is changed to a passivized form by adding the passive marker *bei* ‘by’, the sentence becomes unacceptable. This proves that the verb did not lose its agent role through passivization, unlike its English equivalent.

To account for such data, Pan (1996) proposed that verbs in this case have undergone a morphological operation: the aspect marker *zhe* deletes their agent roles and the verbs are therefore compatible with the argument structure shown in (2). Such an operation is shown in (6):

(6): *Zhe* operation: <agent, theme, location> → <theme, location>

The reason that *zhe* has this function, according to Pan (1996), is because of its ‘semantic property’---‘*zhe* presents a state’, and ‘since a verb without agent is more stative than one with it, deleting the agent role is one way to satisfy the semantic property of *zhe*.’ He argues further that examples like (5) in Chinese serve the same discourse

function as English LIC as proposed by Bresnan (1994): to (re)introduce the referent of the NP into the scene, the NP being the presentational focus.

However, what makes the Chinese LIC picture more complicated is that *zhe* is not the only aspect marker that enables such verbs to appear in LIC. As the following example shows, the aspect marker *le* seems to be interchangeable with *zhe*. Without at least one of these two aspect markers, the sentence becomes unacceptable:

- (7) zhi shang xie \*(**le/zhe**) yi ge zi  
 paper on write LE/ZHE one CLS character  
 ‘On the paper was written a character.’

Sybesma (1997) proposed that both *le* and *zhe* are resultative, and they have a similar effect, which is to ‘stativize the event’ and to ‘halt the action and indicate that the resulting state remains’. Support for this proposal comes partly from examples such as (7) in which the two aspect markers appear to be equally acceptable. If *le* is stative, just as *zhe* is, then we would expect *le* to be able to delete the agent role the same way that *zhe* does, since being stative is the requirement for such a morphological operation in Pan’s (1996) analysis. In this way, we seem to be able to account for examples such as (7). However, as this paper will show, *le* and *zhe* actually perform different functions in LIC. This will further prove that *le* and *zhe* denote different aspectual meanings.

### 3. Different effects of *le* and *zhe* on Chinese LIC

Even though *le* and *zhe* are interchangeable in examples such as (7), closer examination reveals that in two aspects they are actually very different in LIC as regards: a) whether the agent can appear; b) whether the postverbal NP can be omitted. This section will present these differences in detail, which will lead to the conclusion that the two structures serve different discourse functions as discussed in section 4.

#### 3.1. Deletion of the agent role

Pan (1996) noted that a crucial difference between the two aspect markers is that *zhe* does not allow an agent to co-occur in LIC, whereas *le* does. For example,

- (8) a. zhi shang Zhangsan xie **le** yi ge zi  
 paper on Zhangsan write LE one CLS character  
 ‘On the paper Zhangsan wrote a character.’

- b. zhi shang (\*Zhangsan) xie **zhe** yi ge zi

In (8a), the aspect marker *le* co-occurs with the agent <Zhangsan>, whereas in (8b) the aspect marker *zhe* cannot.

In addition, the passive marker *bei* ‘by’ in Chinese can also appear with the agent when *le* is used, while this is not allowed with *zhe*:

- (9)a. zhi shang bei Zhangsan xie **le** yi ge zi  
 paper on by Zhangsan write LE one CLS character  
 Lit: ‘On the paper was written a character by Zhangsan.’  
 b. \*zhi shang bei Zhangsan xie **zhe** yi ge zi

The contrast between (8a), (8b) and (9a), (9b) proved to Pan that transitive verbs appearing in Chinese LIC must have undergone a specific agent deletion rule triggered only by *zhe*. He noted briefly that in terms of LIC with *le*, it is the result of argument dropping when the agent is not present.

Such contrasts between (8a), (8b) and (9a), (9b) are unexpected following Sybesma’s (1997) proposal that *le* can ‘stativize an event’ and Pan’s (1996) proposal that the stative aspect marker deletes the agent role. There are two possible approaches to solve this problem: we either reject the proposal that *le* is stative to explain why the agent role can appear optionally; or allow that *zhe* can delete the agent role due to some reason other than being stative. As we will show in the following sections, more contrasts between LIC with *le* and LIC with *zhe* prove that *le* is not stative in the same way as *zhe*.

### 3.2. Omission of the postverbal NP

In addition to the difference between LIC with *le* and LIC with *zhe* regarding whether to allow agent roles to appear with verbs such as *xie* ‘write’, a previously unnoticed difference is whether to allow the postverbal NP to be omitted. In LIC with *le*, the postverbal NP does not have to appear when it can be recovered from discourse; whereas in LIC with *zhe*, the postverbal NP has to be present. This is demonstrated in example (10):

- (10) a. zhe zhang zhi shang (yijing) xie **le** (zi), ni xie na zhang ba.  
 this CLS paper on already write LE character, you write that CLS particle  
 ‘‘This piece of paper is already written on. You write on the other one.’’  
 b. zhe zhang zhi shang xie **zhe** \*(zi), ni xie na zhang ba.

In (10a) where *le* occurs, the postverbal NP can be left out, leaving a surface Loc+V+*le* structure, and the sentence is still acceptable. On the other hand, in (10b) where *zhe* occurs, the sentence becomes unacceptable when the postverbal NP does not appear.

It may be observed that a surface Loc+V+*zhe* structure can occur in the following environment:

- (11) a. Ni zenme zhidao zhe ge xiaoxi de?  
 You how know this CLS news particle  
 How did you know about this news?

- b. Baozhi shang xie zhe \*(ne)  
 Newspaper on write *zhe* particle  
 Lit: 'On the newspaper was written' (It is written in the newspaper.)

To serve as an answer to (11a), (11b) could omit *zhege xiaoxi* 'this news', leaving a surface Loc+V+*zhe* order. However, I propose that *zhege xiaoxi* was actually left out of the sentence initial position rather than the postverbal position, and it is not a locative inversion structure to begin with. This is because sentences such as (11b) can only appear as answers to questions or comments on the information denoted by the NP such as *zhege xiaoxi*, and the sentence final particle *ne* has to be present. *Ne* used in this situation is a 'response to expectation' (Li and Thompson, 1989); that is, it serves the function of noting the sentence as a response to the hearer's claim or belief and 'has the effect of calling on the hearer to pay particular attention to the information conveyed by the sentence' (ibid). Take (11b) for example. It is used as a response to the hearer's inquiry about the news, and the speaker is telling the listener to pay particular attention to the information that the news was written in the newspaper. As a result, sentences with *ne* are never used to initiate a conversation. In the case of a surface Loc+V+*zhe* order such as (11b), the NP cannot denote new, indefinite information but only old, definite information since it has to be what the conversation is about. Therefore, it functions as the topic of the conversation and a topic usually occupies the sentence initial position. That is to say, sentences such as (11b) are not derived from a locative inversion structure. They are in fact derived through topic-dropping.

LIC with *le*, on the other hand, does not have this restriction. It does not have to serve as a response. For example:

- (12) a. baozhi shang xie **le**, suoyi wo zhidao.  
 newspaper on write **le**, so I know  
 Lit: 'On the newspaper writes (it), that is why I know.'  
 b. \*baozhi shang xie **zhe**, suoyi wo zhidao.

Even when it serves as a response, it cannot co-occur with *ne*. This is shown in (13):

- (13) a. Ni zenme zhidao zhe ge xiaoxi de?  
 You how know this CLS news particle  
 How did you know about this news?  
 b. Baozhi shang xie **le** (\*ne)  
 Newspaper on write *le* particle  
 Lit: 'On the newspaper was written' (It is written in the newspaper.)

Example (13b) demonstrates that Loc+V+*le* cannot co-occur with *ne*.

The above examples prove that Loc+V+*zhe* can only leave out the NP when the sentence final particle *ne* is present. The NP represents information already known and serves as a topic. This contrasts with Loc+V+*le*, which can omit the postverbal NP even when we do not know what the NP refers to specifically. In (10a) above, for instance, the speaker does not have to point out which characters were written on the paper. Indicating that there were already some characters on the piece of paper is enough. It can serve to initiate a conversation, unlike (11b). Therefore, LIC with *le* and LIC with *zhe* are different regarding whether to allow the postverbal NP to be omitted. This leads to the discussion in the next section that the two structures have different discourse functions.

#### 4. Discourse functions

Pan (1996) proposes that Chinese LIC with *zhe* has the same discourse function as English, which is to (re)introduce the postverbal NP into the scene referred to by the locative. I further propose that LIC with *zhe* and LIC with *le* in fact serve different discourse functions: whereas the postverbal NP in LIC with *zhe* is the presentational focus; the structure of LIC with *le* is to comment on the initial locative (Du, 1999)<sup>2</sup>.

Evidence to support this comes from the data presented in the section above. We have seen that post-verbal NP can be omitted in LIC with *le*, as in (10a). This suggests that the post-verbal NP cannot be presentational focus, since it does not even have to appear. Thus the discourse function of the sentence cannot be to introduce such a non-required NP onto the scene. Instead, the sentence is used to comment on the initial locative. Take (10a) for example: the sentence makes the comment that the piece of paper is already written on and suggests the listener use another piece of paper. It is not important what is written on it though.

Such a difference in discourse function also explains why agent roles can appear in LIC with *le* but not in LIC with *zhe*. LIC with *zhe*, just as the locative inversion structure in English proposed by Bresnan (1994), serves to introduce or reintroduce the postverbal NP on the scene referred to by the locative. Such a discourse function imposes a <theme, location> argument structure on the verb, with the postverbal NP being the theme. Therefore, *zhe* has to delete the agent role of the verbs such as *xie* 'write' for it to conform to such an argument structure. On the other hand, LIC with *le* does not serve the same discourse function and the verbs do not, therefore, have to conform to such an argument structure. An agent can thus appear, as shown in (8a) and (9a) above.

To summarize, we have shown that in locative inversion structure with the special agentive verbs such as *xie* 'write', even though aspect markers *le* and *zhe* seem to be interchangeable, they also demonstrate crucial differences. In addition to the difference of obligatorily deleting the agent role, they also differ in terms of whether to allow the

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<sup>2</sup> We may argue that LIC with *le* in Chinese does not involve any inversion at all: the initial locative, which is a NP configuration (Li, 1990), is the sentence topic. Such a conclusion, however, may require further research on the other types of verbs such as *lai* 'come' or *zhan* 'stand' that co-occur with *le* in locative inversion.

postverbal NP to be omitted. The contrast between the two leads to the conclusion that the two structures do not serve the same discourse functions. Whereas the LIC with *zhe* serves to introduce the postverbal NP into the scene, the LIC with *le* serves to comment on the locative. More specifically, it is to show how the action expressed by the verb affects the locative. These differences cannot be explained if Sybesma's proposal is adopted, which states that both *le* and *zhe* are resultative and have the function to stativize<sup>3</sup>. Following Smith (1991), I will now argue that *zhe* is a resultative stative marker, whereas *le* is a perfective marker denoting a closed event.

**5. The semantics of *le* and *zhe***

Section 4 has shown that LIC with *le* and LIC with *zhe* perform different discourse functions. Whereas with *zhe* the structure focuses on the result which is to introduce the postverbal NP on the scene, with *le* the structure serves to comment on the initial locative. For example,

- (14)a. zhi shang xie **zhe** yi ge zi  
 paper on write ZHE one CLS character
- b. zhi shang xie **le** yi ge zi  
 paper on write LE one CLS character  
 'On the paper was written a character.'

(14a) emphasizes that through the action of *xie* 'write', the character is on the paper and such a result is maintained. On the other hand, (14b) does not emphasize such a result at all. It simply comments that this piece of paper is already written on. That is to say, it does not include the span of time after the action was performed.

Such a contrast between (14a) and (14b) is derived from the different aspectual meanings between *le* and *zhe*. Whereas *zhe* can denote that a result after an action is stativized and maintained; *le* can only focus on as far as the ending point of the action. This is compatible with Smith's (1991) analysis of *le* and *zhe*. Smith (1991) classifies *le* and *zhe* as being perfective and imperfective markers respectively. As aspectual markers, they denote different perspectives a speaker takes on a situation. Being a perfective marker, *le* focuses on the span between the initial and final endpoints of the situation, including the two endpoints. The schema for *le* given by Smith (1991) is shown below:

- (15) Temporal schema for the *-le* perfective
- |                    |                  |
|--------------------|------------------|
| <i>I</i> (initial) | <i>F</i> (final) |
| /                  | /                |

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<sup>3</sup> Sybesma states that the only difference between *le* and *zhe* is that *zhe* signals success, whereas *le* signals delimitation. While I agree with him that *le* can signal delimitation, I disagree that *le* is resultative or stative.



*Le* presents a situation that spans the initial and final endpoints. It does not take account of the stage after the final endpoint. That is to say, *le* represents a closed situation. Therefore, LIC with *le* does not extend to the period after the action is completed, which is to introduce the postverbal NP on the scene.

*Zhe*, on the other hand, expresses an imperfective viewpoint without regard to endpoints. Instead, it could focus on any internal or resultative stage. The schema for *zhe* is demonstrated in (16):

(16) The *-zhe* viewpoint

I.....  
 /// State

- a. *Zhe* presents a moment or interval of a situation S that neither its initial nor final endpoints; and that does not precede the initial point.
- b. Intervals focused by *zhe* have the [+State] property.

In sum, the basic meaning of *zhe*, according to Smith (1991), is resultative stative. In LIC with *zhe*, *zhe* focuses on the stage after the action of the verb is performed. In example (14a), it focuses on the period after the result of the action of *xie* 'write', which is the character being on the paper and stays on it.

To summarize, this paper investigates the differences between the locative inversion structures with special agentive verbs appearing with two aspect markers: *le* and *zhe*. It shows that in addition to differing whether they allow the agent to appear, they also differ regarding omitting the postverbal NP. These differences lead to the conclusion that the two serve different discourse functions, which suggests further that *le* and *zhe* denote different aspectual meanings, as Smith (1991) has categorized.

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ZHANG: LOCATIVE INVERSION

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