

At the crossroads of aspect and passivization: Agent in Mandarin locative inversion

Mandarin has overt morphological markers specifically for aspect, unlike English and many other languages. This saliency of aspectual markers discloses a curious interaction between aspect and passivization: Mandarin locative inversion (LI) is a construction that allows only unaccusative and passivized transitive verbs with the agent absent from the surface structure; this talk reveals that the imperfectly marked LI passes some agent tests while it fails others. This seemingly conflicting result of agent tests demands re-addressing the presence of agent in Mandarin LI and an explanation for the exact mechanism of how aspect interacts with the agent in this construction.

Mandarin LI In the SVO language Mandarin, LI is characterized by an inverted locative taking up the pre-verbal position, thus LOC V NP. The proposal in this abstract is based on the premise that post-verbal NPs are themes in Mandarin LI, parallel to Bresnan & Kanerva (1989)'s analysis for Chichewa LI. To paraphrase, the verbs in Mandarin LI are either unaccusative or 'passivized' transitive. Since there is no overt morphological marking for passivization in Mandarin, the transitive verbs are passive in the sense that the agent is absent from the surface form of LI while the theme remains in post-verbal position, as in (1) below. For unaccusatives, Mandarin LI requires the locative to modify the theme; for passivized transitives, LI needs to have the reading that the theme is in a new location resulted by the prior action denoted by the verb. Mandarin LI can be aspectually marked with imperfective *-zhe* or perfective marker *-le*. I argue that LI-*zhe* is essentially stative. For transitives, the stativity of LI-*zhe* hinges on the change-of-location reading. I will show in the talk that non-stative LI-*zhe* isn't truly LI.

Data I start with agentive tests with passivized transitives in imperf/perf alternation. Imperfective LI-*zhe* fails agentive by-phrase test (2), referential instrumental (3) and event-related adverb modification (4), while perfective LI-*le* passes all of them. In comparison, both LI-*zhe* and LI-*le* pass the purpose clause test (5). When the sentence does not denote change-of-location, LI-*zhe* loses stative reading (6).

- | | |
|---|---|
| 1. [LOC Dishang] [VP ke -zhe/-le [DP sigē zi]].
Floor.on carve IMPF/PERF 4.CL words
'On the floor four words have been carved.' | <i>Mandarin LI - transitive 'write'</i> |
| 2. [LOC Dishang] <u>bei John</u> ke * -zhe/-le sigē zi.
Floor.on <u>BEI John</u> carve IMPF/PERF 4.CL words
'On the floor 4 words have been carved by John.' | <i>Agentive by-phrase</i>
The door seemed opened (*by Mary). |
| 3. [LOC Zhishang] <u>yong zhezhǐbǐ xiě</u> * -zhe/?-le sigē zi.
Paper.on <u>with this pen</u> write IMPF/PERF 4.CL words
In.: 'On the paper 4 words have been written with this pen.' | <i>Strongly referential instrumental adverb</i>
Der Brief ist mit (?? <u>diesem</u>)
Bleistift geschrieben.
'The letter's written with (?? <u>this</u>) pencil.' |
| 4. [LOC Zhishang] <u>zuijìn</u> xiě * -zhe/-le sigē zi.
Paper.on <u>recently</u> write IMPF/PERF 4.CL words
In.: 'On the paper 4 words were written recently.' | <i>Event-related adverb</i>
The recently dressed/shaved people
('recently' modifies the event, not state) |
| 5. [LOC Zhishang] xiě -zhe/-le shuoming, <u>haorang</u> tā lijiē
Paper.on write IMPF/PERF illustration <u>so.that</u> he know
'On the paper is illustration written so that he will know.' | <i>Purpose clause</i>
*The bureaucrat bribes easily to avoid the draft. / The bureaucrat was bribed [PRO to avoid the draft]. |
| 6. [LOC Xiyijili] (zai) xi -zhe yifu.
Washing-machine.inside PROG wash IMPF clothes
'In the washing machine clothes are being washed.' but not stative: '... clothes have been washed.' | <i>Stative reading & change of location</i> |

The above data are the first in Mandarin LI literature that show that the imperfectly marked LI with a passivized transitive does not have a uniform result across different agent tests. The data are significant in that, by comparing imperf/perf LI-*zhe/-le* against these tests, we can pin-point with this minimal pair of (im)perfectivity the interaction of aspect and agent in passivization.

Regarding agentivity, I follow Alexiadou et al. (2014) claim that the ability to control into purpose clauses is the hallmark of a syntactically present agent. I thus take (5) as evidence that the agent is present in Mandarin LI. I further argue based on (6) that since transitive LI-*zhe* necessitates a change-of-location reading, it should be more finely characterized as resultative stative, in the sense that it describes the state resulted from the event denoted by V. Two conjectures are shown to follow: a) The variable behavior of LI-*zhe* regarding agent tests is explained as a clash between eventive modification

of adverbs and LI-*zhe*'s selection requirement on taking a state; b) Resultative statives (LI-*zhe*) as defined in this talk have agent in their structures while they do not allow eventive modification.

Analysis Evidence that agent is present in LI-*zhe* is provided by purpose clauses (5). As for LI-*zhe* selecting a state, (4) shows 'recently' can't target the event in LI-*zhe* and describe that 'writing' took place recently; instead, (4) only means the state in which words are on the paper holds at a recent point in time. This differs with LI-*le* which allows the former eventive reading. The stative/eventive distinction between LI-*zhe*/*le* explains (2)-(3): Since LI-*zhe* selects a state it blocks modification that's unidentifiable from the resultative state. In (2), judging from the state alone, it is difficult to make inference to the specific person that has carved the words, which contrasts with the ambivalent acceptability of %*the text seems written by a genius*, where the genius of the author can be inferred from the quality of the text. This also holds with German (3): it becomes much worse if the instrument is modified with a demonstrative that specifies the instrument. While it is possible to infer from the strokes on the letter that it is written by pencil or pen, we cannot tell from the strokes which single pencil was used. LI-*zhe* denotes a resultative state: The unavailability of stative reading in (6) contrasts with (1). In (1), 'words' are understood to be in a new location 'wall' resulted by the writing event; in (6), there is no change-of-state, since clothes cannot be inside a washing machine as a result of washing, which explains the badness. This contrast suggests that a change-of-location meaning is necessary for LI-*zhe* to have a stative reading, which implies that it is a state resulting from a prior event—therefore resultative state—rather than an underived state. **Implications:** We thus conclude that LI-*zhe* is a resultative stative which disallows eventive modification but allows a syntactically present agent. This result diverges from previous studies in German, English, Greek and Serbo-Croatian (e.g. Bešlin 2022, Alexiadou 2008, 2014), where it was suggested that since the layer that introduces the agent (VoiceP, in their terms) is above the layer introducing the event (vP), whenever the agent is present (evidenced by the availability of agentive by-phrase), the event should be accessible. Mandarin LI data show a distinctive pattern where the event can be inaccessible even when the agent is present.

Mandarin LI & unaccusativity Due to space limitations, I'll only discuss the unaccusativity of the most controversial group of verbs in LI, namely verbs that require a theta role that controls or causes the activity – motional/posture verbs such as 'fly', 'run', 'sleep' etc. First, as noted above, I take the ability to control as the sign of agent presence. As a baseline, (7) shows that the argument of motional verbs can appear post-verbally in Mandarin LI. In comparison, (8) shows the post-verbal argument cannot control into a purposive clause with perfective or imperfective LI, which suggests the absence of agent and thus the unaccusative status of the matrix V. As a side note, (7) also shows that in LI-*zhe*, even motional verbs that denote an ongoing event requiring the active participation of agent will block the progressive marker *zai*, further lending support to our argument above that LI-*zhe* is stative.

- | | |
|---|---|
| 7. [LOC Waimian] (* zai) pao - zhe yige ren.
Outside PROG run IMPF 1 CL person
'Outside's running someone.' | <i>Mandarin LI</i> |
| <hr/> | |
| 8. *[LOC Waimian] pao - zhe yige ren, [PRO <u>haorang</u> ziji
bianshou].
Outside run IMPF 1 CL person <u>so.that</u> self become thinner
In.: 'Outside's running someone, so that him/herself will be
thinner.' | <i>LI with Purpose clause</i>

*Near the oasis lay two sheiks
[without PRO talking]. |

An alternative, non-unaccusative information structure analysis is proposed in (Xu & Pan, 2019), who treat the post-verbal NP 'a person' as a topicalized right-adjoined agent. The analysis cannot account for the unavailability of purpose clause (additional issues with the analysis will be discussed in the talk).

Conclusion We observe that the passive Mandarin LI-*zhe* can control purpose clause but due to its stativity it fails other agent tests. This in turn suggests that passives may have a syntactically present agent even when the event is inaccessible, a result that contradicts previous studies which argue that event is necessary for the presence of agent in passives.

Sel. ref. Alexiadou, Gehrke, Schäfer. 2014. The argument structure of adjectival participles revisited. *Lingua*. Bešlin. 2022. Revisiting Passive Participles: Category Status and Internal Structure. *LI*.