

STATE EVENTUALITIES AND ASPECT MARKER *LE* IN CHINESE*

Jung-hsing Chang

ABSTRACT

This paper discusses why the aspect marker *le* in Chinese has been analyzed in many different ways in previous studies when occurring with stage-level states, and argues that it does not shift the given state into an activity or an achievement, as suggested by Smith (1997) and Szeto (1988). In addition, this paper proposes that the aspect marker *le*, when occurring with stage-level states, is able to evoke a boundary, to which the adverbial *chabuduo/jihu* 'almost' can make reference. Because the boundary of an individual-level state is usually not evoked, the occurrence of an individual-level state with the adverbial *chabuduo/jihu* 'almost' is impossible.

1. INTRODUCTION

Pustejovsky (1995:15), following Carlson (1977) and Kratzer (1989), distinguishes two kinds of states: stage-level states and individual-level states. Predicates such as *hungry*, *sick*, and *clean* in English are stage-level states, also known as *temporary* or *transient states*, because they are usually identified with non-permanent states of individuals, whereas predicates such as *tall*, *intelligent*, and *overweight* in English are individual-level states, also known as *permanent states*, because they might be thought of as properties that an individual retains, more or less, throughout its lifetime, and can be identified with the individual directly. As pointed out by Pustejovsky (1995), these two kinds of states have different syntactic behavior. For example, only the stage-level states can appear as resultative predicates, whereas the individual-level states typically cannot, as (1) and (2) illustrate.

* This work was supported by the Chiang Ching-kuo Foundation. I would like to thank two anonymous reviewers for helpful comments on the earlier draft of this paper.

- (1) Stage-level states
 - a. John drank himself sick with that cheap brandy.
 - b. Watching the commercial on TV made John hungry.
 - c. Bill wiped the counter clean before serving us coffee.
- (2) Individual-level states
 - a. *Bill ate himself overweight over the years.
 - b. *John read himself intelligent with the Great Books.

As suggested by Yeh (1993) and Smith (1997), state verbs in Chinese can also be classified into stage-level states and individual-level states.¹ Stage-level states include predicates such as *e* 'hungry' and *lei* 'tired', whereas individual-level states include predicates such as *haoke* 'hospitable' and *pa she* 'afraid of snake'. These two types of states differ from other eventualities such as activities, achievements, and accomplishments in that they can take degree adverbs such as *hen* or *feichang* 'very', while other eventualities cannot, as illustrated in (3) and (4).²

- (3) a. Stage-level state

Ta	hen/feichang	lei
He	very	tired
'He is very tired.'		
- b. Individual-level state

Ta	hen/feichang	haoke.
He	very	hospitable
'He is very hospitable.'		
- (4) a. Activity

*Ta	hen/feichang	pao.
He	very	run

¹ Tsai et al. (1999) and Huang et al. (2000) classify the states into inchoative states and homogeneous states. Inchoative states are known as stage-level states, whereas homogeneous states as individual-level states.

² As pointed out by Yeh (1993), not all state verbs are compatible with degree adverbs such as *hen* and *feichang* 'very'. State verbs such as *shi* 'be', *xing* 'name after' and *cunzai* 'exist' are not gradable; therefore, they do not occur with degree adverbs.

- b. Achievement
 *Ta hen/feichang si.
 He very die
- c. Accomplishment
 *Ta hen/feichang xie yi feng xin.
 He very write one Cl. letter

Though both stage-level states and individual-level states are compatible with degree adverbs, they do not have the same behavior with respect to the aspect marker *le*.³ The stage-level states can occur with the aspect marker *le*, whereas the individual-level states cannot, as the examples in (5) and (6) show.⁴

- (5) Stage-level states
 a. Ta e le.
 He hungry LE
 'He got hungry.'
- b. Ta lei le.
 He tired LE
 'He got tired.'
- (6) Individual-level states
 a. *Ta haoke le.⁵
 He hospitable LE
- b. *Ta pa she le.
 He afraid snake LE

³ This paper discusses the function of the aspect marker *le*, when occurring with stage-level states; it will not discuss different opinions among scholars as to whether verbal *le* and sentential *le* are two different morphemes, or whether they are variants of the same morpheme. Readers who are interested in these issues can refer to Rohsenow (1978), Spanos (1979), Huang (1987), Huang and Davis (1989), Shi (1990), and Zhang (1995) for the one-morpheme approach, and to Wang (1954), Chao (1968), Li and Thompson (1981), Li, Thompson, and Thompson (1982), Chu (1983), Zhu (1984), Chu and Chang (1987), Lü (1991), and Mei (1994) for the two-morpheme approach.

⁴ For the distributional tendencies of stage-level states and individual-level states with the aspect marker *le*, see Tsai et al. (1999).

⁵ In certain contexts where there is an aspectual shift, changing an individual-level state into a stage-level state, the occurrence of an individual-level state with the aspect marker *le* is acceptable.

The aspect marker *le* has been analyzed in many different ways when it occurs with stage-level states. For example, (a) Chao (1968:699) suggests that it implies a change from a different previous condition, (b) Li and Thompson (1981:188) claim that it suggests a bounded situation, (c) Teng (1975, 1986) and Chang (1991) propose that it refers to the inchoative/inceptive aspect, (d) Szeto (1988:74) argues that it links a change of state and the pre-inceptive situation into succession, converting a state verb into an achievement verb, and (e) Smith (1997:286) and Teng (1975) assert that it changes a state verb into an activity verb.

At first glance, these analyses differ so greatly that they do not seem to have anything in common. For example, achievements and activities belong to two divergent eventualities and have discrete syntactic properties; it is not clear why the state expressions with the aspect marker *le* are described as activities in Smith's (1997) analysis, but as achievements in Szeto's (1988). In addition, a bounded situation is usually used to refer to an eventuality with an endpoint, whereas the inceptive aspect is usually used to describe the initial point of an eventuality; it is not clear either why the state expressions with the aspect marker *le* are treated as involving an endpoint in Li and Thompson (1981), but as involving an initial point in Teng (1975, 1986) and Chang (1991).

This paper attempts to answer the following two questions: (a) What is the function of the aspect marker *le*, and (b) how and why has the aspect marker *le* been analyzed in many different ways in previous studies when it occurs with stage-level states? To investigate answers to these questions, I will first discuss the *slightly*- and *almost*-adverbial tests suggested by Talmy (1988:186-187) and their relations to state eventualities, holding that these two adverbial tests can help us uncover the function of the aspect marker *le* when in association with stage-level states.

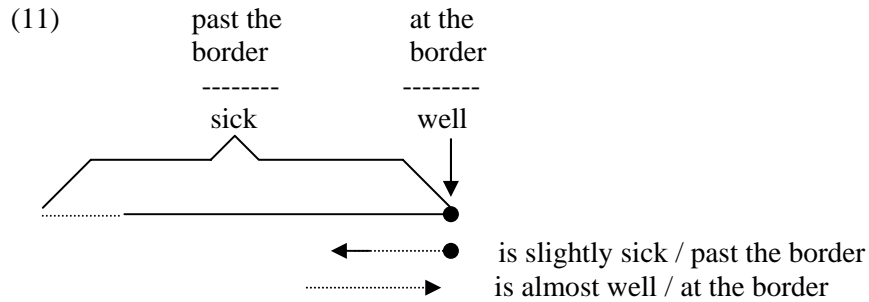
2. SLIGHTLY- AND ALMOST-ADVERBIAL TESTS

According to Talmy (1988), the English state predicates in a pair like *sick* and *well* behave contrarily when in association with grammatical forms specifying degree like *slightly* and *almost*. That is, *sick* is compatible with *slightly*-adverb, but not *almost*-adverb, whereas *well* is

compatible with *almost*-adverb, but not *slightly*-adverb, as in examples (7) and (8). Crucially, they are found to parallel the behavior of certain kinds of expressions that specify spatial relations, e.g., *past the border* and *at the border*. Like the state predicate *sick*, the prepositional phrase *past the border* is compatible with *slightly*, but not *almost*, whereas the prepositional phrase *at the border*, like the state predicate *well*, is compatible with *almost*, but not *slightly*, as seen in (9) and (10).

- (7) a. ?He's almost sick.
b. He's slightly sick.
- (8) a. He's almost well.
b. *He's slightly well.
- (9) a. ?He's almost past the border.
b. He's slightly past the border.
- (10) a. He's almost at the border.
b. *He's slightly at the border.

To account for the contrast in (7)–(10), Talmy (1988) presupposes a schematic axis in which each state predicate labels a different portion of that axis. The state predicates seem in particular to presuppose a directed line bounded at one end; *well* refers to the endpoint while *sick* refers to the remainder of the line, correlating greater magnitude with greater distance along the line, as schematized in (11). These are called the 'axial properties', or 'axiality' (p. 187), of the lexical items, i.e., the specific relations each has to a particular conceptual axis and to other lexical items with referents along the same axis. Talmy (1988) clearly points out that it is the lexicalization of such axiality that can align state predicates with expressions of spatial relation.



Talmy (1988:188) further states that the axiality of a grammatical form can conflict with that of a lexical item and, accordingly, can cause the latter to shift. For example, *sick* in (12)—now associated with grammatical forms that refer to an endpoint—shifts from its basic 'directed shaft' type of axiality, and indeed from its reference to an axis of 'health'; it now specifies the endpoint of an axis pertaining to 'feeling physically bad'.

- (12) (After exposure to the virus, he felt worse and worse and) he was almost sick at one point. (Talmy 1988:188)

Talmy's observation suggests that (a) *almost*-adverb is associated with eventualities involving a boundary (or an endpoint), and (b) it is possible for an eventuality to have an aspectual shift in an appropriate context. Talmy's suggestion that *almost*-adverb can co-occur with state predicates (e.g., *well*) when conceived of as involving a boundary is in consonance with Smith's (1997) analysis that *almost* makes reference to the endpoint.

Having discussed state eventualities such as *sick* and *well* and the prepositional phrases such as *past the border* and *at the border*, and their compatibility with *almost*-adverb or *slightly*-adverb, in what follows, I will return to the questions regarding the aspect marker *le* in Chinese.

3. STATE EVENTUALITIES AND THEIR ASPECTUAL PROPERTIES

As previously mentioned, state verbs in Chinese can be classified into two types: stage-level states and individual-level states. It is noted that both stage-level states and individual-level states are compatible with the

adverbial *youdian* 'slightly', but not with the adverbial *chabuduo/jihu* 'almost', as exemplified in (13) and (14). The incompatibility of these two kinds of states with the adverbial *chabuduo/jihu* 'almost' indicates that they do not involve a boundary or an endpoint.

- (13) Stage-level states
- a. Ta youdian e.
He slightly hungry
'He is slightly hungry.'
 - b. Ta youdian lei.
He slightly tired
'He is slightly tired.'
 - c. *Ta chabuduo/jihu e.
He almost hungry
'He is almost hungry.'
 - d. *Ta chabuduo/jihu lei.
He almost tired
'He is almost tired.'
- (14) Individual-level states
- a. Ta youdian haoke.
He slightly hospitable
'He is slightly hospitable.'
 - b. Ta youdian pa she.
He slightly afraid snake
'He is slightly afraid of snakes.'
 - c. *Ta chabuduo/jihu haoke.
He almost hospitable
'*He is almost hospitable.'
 - d. *Ta chabuduo/jihu pa she.
He almost afraid snake
'*He is almost afraid of snakes.'

As previously discussed, the stage-level states can occur with the aspect marker *le*, as seen in (15), repeated from (5). Surprisingly, with the aspect marker *le*, the stage-level states turn out to be grammatical when occurring with the adverbial *chabuduo/jihu* 'almost', as shown in (16).

- (15)a. Ta e le.
He hungry LE
'He got hungry.'
- b. Ta lei le.
He tired LE
'He got tired.'
- (16)a. Ta chabuduo/jihu e le.
He almost hungry LE
'He is almost hungry.'
- b. Ta chabuduo/jihu lei le.
He almost tired LE
'He is almost tired.'

In contrast, the individual-level states are not compatible with the aspect marker *le*, as shown in (17). Because they do not occur with the aspect marker *le*, their occurrence with the adverbial *chabuduo/jihu* 'almost' is impossible, as illustrated in (18).

- (17)a. *Ta haoke le.
He hospitable LE
- b. *Ta pa she le.
He afraid snake LE
- (18)a. *Ta chabuduo/jihu haoke le.
He almost hospitable LE
- b. *Ta chabuduo/jihu pa she le.
He almost afraid snake LE

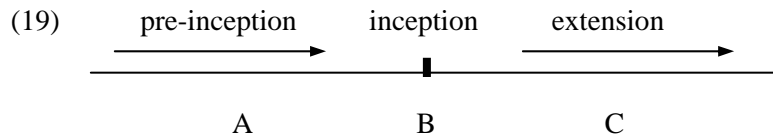
The examples in (16) show that the states can co-occur with the adverbial *chabuduo/jihu* 'almost' only when they are also compatible with the aspect marker *le*. Because stage-level states can occur with *le*, while individual-level states cannot, only the former states can occur with the adverbial *chabuduo/jihu* 'almost'. If the adverbial *chabuduo/jihu* 'almost' is said to occur in the environment where a boundary (i.e., an endpoint) is designated, as Talmy (1988) and Smith (1997) have claimed, then we can propose that the aspect marker *le*, when occurring with stage-level states, is able to evoke a boundary (i.e., the beginning of a

situation), to which the adverbial *chabuduo/jihu* 'almost' can make reference.

To explain why a perfective aspect marker can be used to indicate the beginning of a situation (inceptive meaning) when it occurs with stage-level states, Comrie (1976:19-20) states that:

There may be some sense in saying that since states are less likely to be described by perfective forms than are events (including entries into states), then there is some functional value in utilising the perfective forms of stative verbs to denote the event of entry into the appropriate state, since otherwise there would be little use for the perfective forms of these verbs.

Comrie's statement supports my assumption that the presence of the perfective aspect marker *le* is in fact able to evoke a boundary or an initial point of a stage-level state. In my analysis, a stage-level state with an imposed initial point is schematized in (19).



The diagram in (19), which represents a stage-level state, presupposes a schematic axis that is structured and directed in a particular way. The two different situations, i.e., the pre-inceptive situation (A) and the extensional situation (C), label different portions of that axis, and are separated by the point marked by B. The pre-inceptive situation, called *state of rest* in Smith (1997), represents the situation in which no eventuality takes place, whereas the extensional situation designates the on-going or continuation of an eventuality. Because point B is the boundary of two situations, it can be understood as (a) the endpoint of the pre-inceptive situation, or (b) the initial point of the extensional situation. This explains why the initial point of a stage-level state can also be conceived of as the endpoint.

However, individual-level states actually have permanent properties and comprise an undifferentiated period with no initial point and endpoint; therefore, the point marked by B in stage-level states usually

does not exist in individual-level states. This complies with Huang et al.'s (2000) analysis that inchoative states (i.e., stage-level states) involve an initial point, while homogeneous states (i.e., individual-level states) do not. Note that although stage-level states involve an initial point, this point is usually not evoked without the occurrence of the aspect marker *le*. This explains why stage-level states are compatible with the adverbial *chabuduo/jihu* 'almost' only when the aspect marker *le* also occurs, as exemplified in (16).

Because point B can be understood as a boundary of two situations, it is no surprise that Chao (1968) interprets this point as a change from a different previous condition (i.e., from the pre-inceptive situation to the extensional situation). On the other hand, because point B can be interpreted as the endpoint of the inceptive situation, it is natural that Li and Thompson (1981) consider state verbs with *le* as involving a bounded situation. Because point B can also be considered as the initial point of the extensional situation, Teng (1975, 1986) and Chang (1991) describe state verbs with *le* as involving an inchoative/inceptive aspect.

But why is a state with the aspect marker *le* considered as a derived activity in Smith's (1997) analysis? According to Smith (1997:23, 32), state eventualities comprise an undifferentiated period with no initial point or inherent endpoint, and they have no dynamics, while activity eventualities involve an initial point and have dynamic semantics. When occurring with the aspect marker *le*, a state eventuality (i.e., the stage-level state) is conceived of as having dynamic semantics, thus, involving an initial point. When the eventuality in question is presented as a dynamic situation and has an initial point, Smith argues that there is an aspectual shift, changing a state into an activity. That is why Smith argues that a state eventuality with *le* is a derived activity.

Like Smith (1997), Szeto (1988) maintains that the initial point and the endpoint are not parts of the state eventuality. But unlike Smith, Szeto treats the state eventuality with the aspect marker *le* as an achievement, arguing that the aspect marker *le*, when occurring with a state, indicates entering into a result state from the pre-inceptive situation. That is, the given state is considered as a resultant state reached by the performance of an activity. Szeto assumes that a state with the aspect marker *le* involves an implicit activity associated with it; therefore, a state with the aspect marker *le* is a complex eventuality, i.e., an achievement.

However, because a stage-level state with *le* can still occur with degree adverbs such as *hen* or *feichang* 'very', as (20a) shows, it is argued in this paper that the given state is not shifted into an activity or an achievement, as (20b) and (20c) show.

- (20)a. Stage-level state
 Ta hen/feichang e le.
 He very hungry LE
 'He is very hungry.'
- b. Activity
 *Ta hen pao le.
 He very run LE
- c. Achievement
 *Ta hen ying le na chang bisai.
 He very win LE that Cl. game

To sum up, only stage-level states are compatible with the aspect marker *le*, and they are able to occur with the adverbial *chabuduo/jihu* 'almost'. It is thus suggested that the presence of the aspect marker *le* can evoke the initial point of a stage-level state, to which the adverbial *chabuduo/jihu* 'almost' can refer to, rather than change stage-level states to become activities, as suggested by Smith (1997), or achievements, as suggested by Szeto (1988). In addition, I have pointed out that a stage-level state with *le* receives different analyses, because different authors view it from different situations, e.g., the pre-inceptive situation or the extensional situation.

4. CONCLUSION

This paper has pointed out why the aspect marker *le* in Chinese has been analyzed in many different ways in the literature when occurring with stage-level states, arguing that it does not shift the given state into an activity or an achievement, as suggested by Smith (1997) and Szeto (1988). In addition, it has been suggested that when involving the aspect marker *le*, stage-level states are grammatical with the adverbial *chabuduo/jihu* 'almost', because the aspect marker *le* is able to evoke its initial point. Moreover, individual-level states actually have permanent properties and comprise an undifferentiated period with no initial point

and endpoint, and the initial point of an individual-level state is usually not evoked; thus, the occurrence of an individual-level state with the aspect marker *le* is impossible. Because individual-level states do not take the aspect marker *le*, their occurrence with the adverbial *chabuduo/jihu* 'almost' is impossible.

REFERENCES

- Carlson, G. 1977. *Reference to kinds in English*. Amherst: University of Massachusetts dissertation.
- Chang, Claire Hsun-huei. 1991. *Interaction between syntax and morphology: A case study of Mandarin Chinese*. Honolulu: University of Hawaii dissertation.
- Chao, Yuen Ren. 1968. *A grammar of spoken Chinese*. Berkeley: University of California Press.
- Chu, Chauncey C. 1983. *A reference grammar of Chinese for English speakers*. New York: Peter Lang.
- Chu, Chauncey C., and W. Vincent Chang. 1987. The discourse function of the verbal suffix –LE in Mandarin. *Journal of Chinese Linguistics* 15:309-334.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Huang, Chu-Ren, Kathleen Ahrens, Li-Li Chang, Keh-Jiann Chen, Mei-Chun Liu, and Mei-Chih Tsai. 2000. The module-attribute representation of verbal semantics: From semantics to argument structure. *Computational Linguistics and Chinese Language Processing* 5.1:19-46.
- Huang, L. Meei-jin. 1987. *Aspect: A general system and its manifestation in Mandarin Chinese*. Houston: Rice University dissertation.
- Huang, L. Meei-jin, and Philip W. Davis. 1989. An aspectual system in Mandarin Chinese. *Journal of Chinese Linguistics* 17:128-166.
- Kratzer, A. 1989. An investigation into the lumps of thought. *Linguistics and Philosophy* 12:607-653.
- Li, Charles N., and Sandra A. Thompson. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley: University of California Press.
- Li, Charles N., Sandra A. Thompson, and R. M. Thompson. 1982. The discourse motivation for the perfect aspect: The Mandarin particle LE. *Tense-aspect: Between semantics and pragmatics*, ed. by Paul J. Hooper, 19-43. Amsterdam: Benjamins.
- Lü, Shuxiang. 1991. *Xiandai Hanyu babai ci* [Eight hundred words in modern Chinese]. Beijing: Commercial Press.
- Mei, Tsulin. 1994. Tandai, Songdai gongtongyu de yufa he xiandai fangyan de yufa (The grammar of the common language in Tang and Song and the grammar of modern dialects). *Zhongguo jinlei yuyan ji yuyanxue* [Languages and linguistics within China] 2:61-97.

- Pustejovsky, James. 1995. *The generative lexicon*. Cambridge: MIT Press.
- Rohsenow, J. S. 1978. Perfect *-le*: Aspect and relative tense in Mandarin Chinese. *Proceedings of symposium on Chinese linguistics: 1977 Linguistic Institute of LSA*, ed. by Robert Cheng, Y. C. Li and T. C. Tang, 267-291. Taipei: Student Book Co. Ltd.
- Shi, Z. Q. 1990. Decomposition of perfectivity and inchoativity and the meaning of the particle *le* in Mandarin Chinese. *Journal of Chinese Linguistics* 18.1:95-123.
- Smith, Carlota S. 1997. *The parameter of aspect*, 2nd edition. Dordrecht: Kluwer.
- Spanos, G. A. 1979. Contemporary Chinese uses of *-le*: A survey and a pragmatic proposal Parts I & II. *Journal of the Chinese Language Teachers Association* 14.1:36-70 & 14.2: 47-102.
- Szeto, Yee-kit. 1988. *A semantic description of aspectual and temporal reference in Chinese*. Ph. D. dissertation, University of Ottawa.
- Talmy, Leonard. 1988. The relation of grammar to cognition. *Topics in cognitive linguistics*, ed. by Brygida Rudzka-Ostyn, 165-205. Amsterdam: John Benjamins.
- Teng, Shou-hsin. 1975. *A semantic study of transitivity relations in Chinese*. Berkeley: University of California Press.
- Teng, Shou-hsin. 1986. Hanyu dongci de shijian jiegou [The temporal structure of Chinese verbs]. *Di yijie Guoji Hanyu Jiaoxue Taolunhui Lunwenxuan*. Beijing: Beijing Yuyuan Xueyuan Chubanshe.
- Tsai, Mei-Chih, Chu-Ren Huang, Keh-Jiann Chen, and Kathleen Ahrens. 1999. Towards a representation of verbal semantics—An approach based on near-synonyms. *Working Papers on Chinese Verbal Semantics, Vol. I*, ed. by Kathleen Ahrens, Chu-Ren Huang, and Mei-Chih Tsai, 45-57. Taipei: Academia Sinica.
- Wang, Li. 1954. *Zhongguo yufa lilun* [Theory of Chinese grammar]. Peking: Zhonghua Shuju.
- Yeh, Meng. 1993. The stative situation and the imperfective *zhe* in Mandarin. *Journal of the Chinese Language Teachers Association* XXVIII.1: 69-98.
- Zhang, Lihua. 1995. *A contrastive study of aspectuality in German, English, and Chinese*. New York: Peter Lang.
- Zhu, Dexi. 1984. *Yufa jiangyi* [Lectures on grammar]. Beijing: Commercial Press.

Jung-hsing Chang
Graduate Institute of Linguistics
National Chung Cheng University
Chia-Yi, Taiwan 621, ROC
lngjhc@ccu.edu.tw

Chang, Jung-hsing

漢語的狀態動詞與時貌「了」

張榮興
國立中正大學

本文旨在探討為何文獻中漢語的時貌「了」與階段性狀態動詞（stage-level states）共同出現時，分析諸多歧異。本文認為「了」的出現，並不會將階段性狀態動詞改變成如 Smith (1997) 所認為的行動動詞，或 Szeto (1988) 所認為的瞬間動詞。此外，本文並提出當時貌「了」與階段性狀態動詞共同出現時，能將副詞差不多或幾乎所參照的邊界點顯現出來。而單一性狀態動詞（individual-level states）因為呈現永久持續性狀態，故其邊界點通常無法被顯現出來，所以不能與副詞差不多或幾乎共同出現。