

**Developing the Relative Anteriority Theory
of the Mandarin particle *le***

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The particle *le* in Mandarin Chinese allows for either a perfective or an inchoative reading of a situation^{*}. Exactly which factors determine the aspectual information of these situations, as perfective or inchoative, is a major point of debate. Li and Thompson (1981), often referenced for their thorough description of *le*, distinguish two distinct morphemes. This two-*le* analysis is plausible because *le* can appear in two positions within the sentence and may be realized in both positions within one sentence¹: postverbal and postsentential. A crucial factor in this separation is the apparent variance in meaning of *le* depending on its position in the sentence. Proponents of the two-*le* argument describe the postverbal *le* as a perfective-aspect marker and postsentential *le* (which may follow a verb or its arguments) as the marker of a new (Chao 1968) or currently relevant situation (Li, Thompson and Thompson 1984).

Ziqiang Shi's (1989) analysis, the one considered here, suggests that this separation of role-specific morphemes is unnecessary. Whether postverbal or postsentential, writes Shi (1989), *le* marks situational bounds as relatively anterior².

- (1) Ta xie le yifeng xin. (Shi 1989: 96)
he write LE a letter
He wrote a letter.
- (2) Ta chi rou le. (Shi 1989: 96)
he eat meat LE
Now he eats meat.

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¹ Chao (1968) and Sun (1996) propose that the homophonous *les* have distinct predecessors in classical Chinese. The suffix¹ or postverbal *le* may have derived from the weakened verb *liao* 'to understand', 'to be obvious' or 'to complete' which may lead one to link it with the "complete" of perfectivity. The particle or postsentential *le* Chao (1968) argues, even less definitively, may have emerged from the weakened *lai* 'come'. Chu (1976: n4), however, is of the opinion that "the two *le*'s actually come from the same source, namely *you* [have, exist] as a higher verb." Obviously a very complicated issue, origin of *le* is beyond the scope of this article, though it is included to illustrate the complexity of the issue. Here the argument is restricted to the behavior of the particle(s), and only some of the major issues based on behavior. Ignored are questions of negativity and scope.

Shi's theory attempts to unify the analysis of *le*. His explanation of *le*'s occurrence though simple, is quite efficient and accounts for the majority of the appearances. In this way, Shi's theory is a plausible alternative to the two-*le* analysis. As this essay attempts to further explore Shi's analysis, the instance of double-*le* sentences, often cited for the two-*le* analysis, is explained. The analysis considered here is not all-encompassing, however. Other occurrences, such as the ambiguous and the excessive require attention. Though they raise questions, none of these cases undermine the relative anteriority analysis drastically.

To develop Shi's (1989) above mentioned theory we begin with a definition of boundedness as only a part of the aspectual information given by the sentence. Though boundedness is traditionally distinguished from the perfective and inchoative viewpoints, Shi (1989) includes boundedness and relative anteriority status into a composite schema which amounts to the perfective or inchoative viewpoints. That is, the composite schema of situation type information (e.g. boundedness) and relative anteriority status reveals how the situation is to be understood by the hearer: as complete, terminated, or on going. In order to explore the role of Information regarding telos is significant regarding the optionality of postverbal *le*, in that a complement of the verb can highlight a terminal bound. In these cases, relative anteriority is marked by the postsentential *le* or by context and at the same time fulfilling Shi's suggested role for *le* as relative anteriority marker. Sequential situations act to illustrate the distinct roles of the two *le* realized within the double-*le* sentence, reinforcing the relative anteriority model. While the excessive *le* seems a simple temporal extension of *le* as with certain 'corrective' uses of *le* in the unbounded situation, the ambiguous *le* remains a complicated area for both theories.

RELATIVE ANTERIORITY

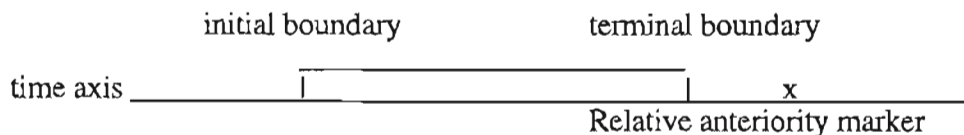
² Tai (1984) suggests word order in Mandarin reflects temporal order. This theory might account in part for why *le* located postverbally routinely suggests perfectivity and postsententially, inchoativity.

The following sentences suggest that the aspectual meaning varies according to where *le* is found in the sentence, as per Li and Thompson (1981). Repeated here, example (1) describes a complete event, the perfective, and (2) an ingressive situation, the inchoative. The two-*le* analysis points to these seemingly opposite meanings to justify separate particles.

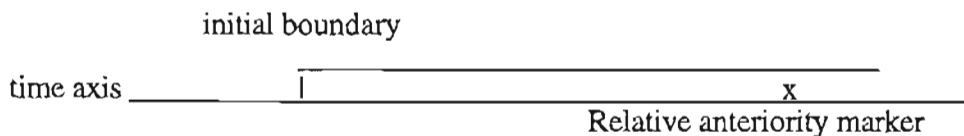
- (1) Ta xie le yifeng xin. (Shi 1989: 96)
 he write LE a letter
 He wrote a letter.
- (2) Ta chi rou le. (Shi 1989: 96)
 he eat meat LE
 Now he eats meat.

Shi (1989), however, suggests that understanding *le* as the grammaticalization of relative anteriority, rather than signaling the perfective or inchoative according to location within the sentence may combine these two roles of *le*. This separation is unnecessary, since in Mandarin “ the particle LE, verbal or sentential, fulfills this grammatical function,” (Shi 1989:107). According to Shi, the reading of the sentence is a composite of the predetermined situation, bounded or unbounded, and the marking of this situation’s bound, terminal or initial, as relatively anterior. Shi’s theory is illustrated in the charts below (3) where (3a) describes (1) and (3b) describes (2) (Ibid.103).

(3)a. bounded situations: *ta xie le yifeng xin*



b. unbounded situations: *ta chi rou le*



In both the bounded and unbounded situations, the relative anteriority marker refers to the nearest anterior bound in the diagram. Assuming that every situation has a beginning and only the bounded have a natural endpoint, these schemata produce accurate predications as

to the interpretations of (1-2), such that (1) is complete having reached the natural endpoint and (2) is ingressive, having only begun to occur.

IMPLICATION OF ACTUAL OCCURRENCE

Actual occurrence is a natural inference from relative anteriority, though Shi does not make this connection in his (1989) article. This factor, however, will influence the readings of sentences with the RVC as well as with what Li, Thompson and Thompson (1984) call current relevance. The relative anteriority theory concurs with Chu's (1976) findings³ that *le* guarantees occurrence of bounded situations in which it appears (4).

- (4)a. Ta sha yizhi ji. (Shi 1989:107)
he kill a chicken
He is to kill a chicken.
- b. Ta sha le yizhi ji (Shi 1989:107)
he kill LE a chicken
He killed a chicken.

In the above example, the first sentence lacks aspectual marking. Smith (1990;1991) calls this neutral aspect. Here, Shi (1989) translates it in the future, although context may imply otherwise (e.g. habitual). Example (4b) includes the marker *le*, which changes the sentence's aspectual meaning from neutral to perfective. Although (4b) does not necessarily occur in the past, it does occur relatively anterior within the situation context.

The particle *le* also implies the beginning or the relevance of an unbounded situation, which necessitates actual occurrence of the initial bound, that is, it has begun to occur anterior to reference time, which just happens to be speech time.

- (5)a. (child pointing to soda) (Li and Thompson 1984: 263)
wo yao he
I want drink
I want to drink. (neutral)
- b. (child to mother, who does not think the child wants his/her soda)
wo yao he le
I want drink
(But) I want to drink. (contradicting mother's belief)

³ Though Chao (1968) speaks exclusively of postverbal *le* of the two-*le* analysis, his findings are relevant to this single-*le* theory.

While (5a) simply declares a state, (5b) highlights the initial bound (by including *le*) in order to emphasize the relevance, the occurrence, of the situation.

MANDARIN ASPECTUAL COMPOSITE SCHEMA

The relative-anteriority theory recommends a combinatory effort between the situation type and the particle *le* in determining aspectual information. Smith (1991) also proposes a composite schema of aspectual meaning (6). However, hers is a composite of viewpoint and situation type temporal schema (Smith 1991:6), such that the perfective is marked as an entity.

- (6) Composite temporal schema for *Mary was walking to school*
- a. [Mary walk to school] I....F (Accomplishment schema)
 - b. [be+ING] ... (Imperfective schema)
 - c. Mary was walking to school I.//////..F (Composite schema)

As the above composite illustrates, the situation type (6a) is the level at which boundedness is specified. The next row (6b) is that which determines the viewpoint, such that situation types are independent from the viewpoint through which they are described.

In the discussion of *le* it is the perfective viewpoint which is of concern, whether the particle marks perfectivity (Li and Thompsom 1981) or marks the situation as relatively anterior (Shi 1989: 95). Li and Thompson (1981) suggest that postverbal *le*, as a perfective-aspect marker, bounds the situation. However, according to Shi (1989), this is a nebulous definition and may be further deconstructed. Comrie's (1976) definition of perfectivity is given below (7).

- (7). ...perfectivity indicates the view of a situation as a single whole, without distinction of the various separate phases that make up that situation.... (Comrie 1976:16)

Instead of *le* marking perfectivity in Mandarin, this viewpoint is the product of a bounded situation and a relative anteriority marker (Shi 1989).

- (8) Composite temporal schema for *Ta xie le yifeng xin*
- a. [Ta xie yifeng xin] I....F (Accomplishment schema, bounded situation)
 - b. [LE] (Relatively anterior)
 - c. Ta xie LE yifeng xin I....F (Composite schema)

- (9) Composite temporal schema for *Ta chi rou le*
- a. [Ta chi rou] I.....F (Activity schema, unbounded situation)
 - b. [LE] (Relatively anterior)
 - c. Ta chi rou LE IF... (Composite schema)

In this way, rather than determine distinct schemata for the perfective and inchoative, they are broken down “into the boundedness of situations and their relative anteriority status,” (Shi 1989: 95).

The role of *le* which marks an unbounded event as relatively anterior (Shi 1989) views the coming into existence of a state, the inchoative. The ingressive is a unique viewpoint in that while the event of becoming is complete, the focus is on the resulting state. As Comrie (1976: 19-20) suggests, “one cannot say that such perfective forms indicate completion of a situation, when in fact they refer to its inception.” In essence, however, its meaning is very similar to that of the perfective. Shi’s diagrams illustrate this similarity more clearly than Comrie’s definition and the two-*le* analysis.

BOUNDEDNESS

Shi’s diagrams inadequately describe occurrences of the particle in situation types apparently neither bounded nor unbounded, such as the excessive reading, and situations both bounded and unbounded. First, this article should explore the concept of boundedness, a fundamental part of the relative anteriority analysis, which makes up part of the Mandarin aspectual composite schema.

According to Dahl (1985:29),

A class of situations or a characterization of a situation is bounded if and only if it is an essential condition on the members of the class or an essential part of the characterization that a certain limit or end-state is attained.

Though this definition provides little more than one’s intuition of the term, we can attempt to understand it by relating it to other concepts. Dahl (1985: 191) uses ‘boundedness’ to “correspond to Vendler’s distinction between ‘accomplishments/ achievements’ on the one hand and ‘activities’ on the other, and to what some authors call ‘telic/atelic’.” Though the telic/atelic dichotomy is appealing in its clarity and relevance to the *le* issue, it is not a direct

corollation since it distinguishes types of activities. ‘Telic’ will help define boundedness; ‘atelic’, however, will not be broad enough category, in that it does not include states which are indeed unbounded situation types.

The term *telic* is applied to a situation or an event “expressing an action tending toward a goal,” (Garey 1957: 106) as in the example (10) as opposed to atelic which lacks such a goal (11).

(10) write a letter

(11) write

Each of the synonymous terms pointed out by Dahl (1985) make this same distinction between situations with a natural endpoint and those without. Atelic, or unbounded, events lack a natural endpoint, such that the terminal point in (12b,13b) is arbitrarily determined. Once begun, atelic events can terminate at any point with the event having occurred. In the case of telic events, a natural endpoint exists beyond which the process cannot occur (12a,13a), and arbitrary termination of such an event does not imply the event occurred, simply that it was begun.

(12)a. He wrote a letter.

(13) a. He was writing a letter.

b. He wrote.

b. He was writing.

The reader will notice, (13b) entails (12b), and the reverse is also true, which contrasts with the bounded situation type: (12a) entails (13a), yet the reverse does not hold.

Boundedness, however, is still quite an intuitive concept. This article will now look at Mandarin and boundedness created in several different manners in order to form a language-specific idea of boundedness.

BOUNDEDNESS WITH *LE*

As indicated by the aspect schema of Mandarin (8), situations and relative anteriority are separate distinguishable entities. Li and Thompson (1981:185-6) propose that boundedness in Mandarin is achieved (that is, the situation is limited) by *le* **and** by one

of these four ways: i) by being a quantified event (14); ii) by being a definite or specific event (15); iii) by being inherently bounded because of the meaning of the verb (16) or iv) by being the first event in a sequence (17). The following examples are given by Li and Thompson (1981).

- (14) ta shui - le san - ge zhongtou
 3sg sleep - PFV three - CL hour
 S/He slept for three hours.
- (15) wo peng - dao - le Lin Hui
 I bump - arrive - PFV Lin Hui
 I ran into Lin Hui (where the important information in the context is whom I ran into).
- (16) ta qu - nian si - le
 3sg last - year die - PFV
 S/He died last year.
- (17) wo chi - wan - le ni chi
 I eat - finish - PFV you eat
 After I have finished eating, then you eat.

Though the above authors equate perfectivity with boundedness, factors other than *le* bound the situations in all of Li and Thompson's (1981) categories. Indeed, the authors continue, only bounded events occur with *le* and only events that occur may be bounded. This statement, however, confuses actual occurrence (an implication of relative anteriority) with boundedness status. This is illustrated in that the above sentences do not all require *le*. Only one category fulfills the expectations in becoming ungrammatical without *le*. The three remaining categories, grammatical without *le*, change in aspectual meaning (Shi 1989)⁴.

- (18) ta shui san - ge zhongtou
 3sg sleep three - CL hour
 S/He sleeps/will sleep three hours.
- (19) wo peng - dao Lin Hui.
 I bump - arrive Lin Hui
 I ran into Lin Hui.
- (20) *ta qu - nian si.
 3sg last - year die

⁴ The following examples are not given by Shi, though the claim is his. I have made these sentences and checked them with a native speaker of Mandarin, Professor Shizhe Huang, to whom I am indebted.

- (21) wo chi wan, ni chi.
I eat finish you eat
After I finish eating, you eat.

Examples (18-19) are fine sentences without the particle *le*. Though they change in aspectual meaning (Smith (1991) calls these sentences aspectually neutral), they remain bounded events. Therefore, these examples, given by Li and Thompson (1981), are not bounded by *le*. The third category (16,20) situation types, also a bounded situation type, are the only instances of the above categories which truly requires *le*. This category does not refute the relative anteriority theory; notice that because the situation (20) occurs anterior to reference time, it requires the marker of actual occurrence.

The final example (21) of a bounded situation type is a complicated example, however, in that the first situation, *wo chi wan*, is both bounded and perfective without *le*. The bounding Resultative Verbal Complement, *wan*, and sequential event, *ni chi*, are the variables which distinguish the behavior of the inherently bounded verb (*si*) in (20) and the bounded activity (*chi wan*) of (21). The optionality of *le* in relatively anterior bounded situations (21) propose that items other than *le* may highlight a terminal bound, making *le* redundant and unnecessary. This redundancy supports *le*'s status as relative anteriority marker.

In order to understand the marking of a bounded situation, and why this terminal bound may be marked by other lexical items and *le* subsequently optional or obligatorily omitted, we must further explore the terminal bound of Mandarin. Elaborating on each case in the above categories, the next sections explain the perfective viewing of a natural endpoint in Mandarin. Though in most cases this will not require amending Shi's schemata, some interesting clarifications can be made.

BOUNDEDNESS WITH AND WITHOUT TELOS: *Completion and Termination*

The independence of termination from completion is rare (Dahl 1981). In Mandarin Chinese, however, a bounded situation marked as relatively anterior (that is, viewed in the

perfective) is conversationally understood to be complete. However, the completion of the event may be denied; telos may or may not be reached (Smith 1990).

In Mandarin bounded situations, telos is not necessarily attained since the reaching of the endpoint can be denied. For example, though the situation (22) is bounded (by being a quantified event), its endpoint is arbitrary rather than natural (the endpoint beyond which the process can no longer occur). Thus, postverbal *le* only guarantees termination.

(22) ta xie le yifeng xin, keshi mei xie wan. (Chu 1976: 48; Tai 1984: 292; Smith 1991)
3sg write LE one-CL letter but not write finish
*S/He wrote a letter, but didn't finish writing it.

Shi's (1989) diagram of the bounded situations suggests the completion of the bounded event, which we have just seen is not necessarily the case. However, conversationally *ta xie le yifeng xin* is understood to include telos (the finishing of the letter). Indeed, this termination-only reading is impossible for many bounded situations such as (18-19) above. The measurement *three hours* does not have the same inherent boundary as *letter* (a closer example would be *night's sleep*), such that the bound is determined by the experience rather than a pre-measurement, as with *letter*. This reinforces the significance of context in bounding situations, which will be discussed in the case of ambiguous *le*. However, the original relative anteriority aspectual diagrams account for these terminal boundaries whether arbitrary or terminal.

There are instances in Mandarin, however, for which telos is guaranteed and these are the situations which support the role of *le* in marking relative anteriority. Some simple verbs (as opposed to the compound which will be discussed below) must occur with *le*, except in the irrealis, lest they be ungrammatical (23-25). This single exception of the irrealis mode reinforces the actual occurrence implication of the relative anteriority marker.

(23)a. (Tai 1984: 294)
ta si-le / *ta si
He died (he is dead).

b. ta xiang si.
3sg want die
He wants to die.

(24)a. (Li & Thompson 1981: 195)
wo wang - le ta - de dizhi
I forget - PFV 3sg GEN address
I forgot his/her address.

b. *wo wang - ta - de dizhi.
I forget - 3sg - GEN address
*I forgot his/her address.

(25)a. ta zou le.
3sg walk PFV.
S/He left.

b. *ta zou.
he exit
He leaves.

c. ta xiang zou.
3sg want walk
He wants to leave.

These events are punctual such that once they begin they are complete. They require *le*, except in irrealis, because the event is understood to occur before another subsequent event.

Telos is also guaranteed when the Resultative Verb Complement, the asserted result, such as *wan* 'finish' and *si*⁵ 'dead/die' appears in the sentence following the presupposed activity (Tai 1984). The RVC indicates precisely the attainment of a final point (Smith 1991:346), since they are bounded events which by definition include telos. Notice that *xie yifeng xin* is distinct from *xie-wan yifeng xin* (26), as shown below.

(26)a. ta xie wan le yifeng xin.
3sg write finish PFV one-CL letter
S/He wrote a letter / finished writing a letter.

b. *ta xie wan le yifeng xin, keshi mei xie wan.
3sg write finish PFV one-CL letter but not write finish
*S/He wrote a letter/ finished writing a letter, but didn't finish writing it.

The ungrammaticality of (26b) makes it clear that *xie-wan* entails reaching the endpoint, ensuring nonrefutability.

The simple verbs and the RVC situation types, then, serve to bound a situation as do the verb arguments in *xie yifeng xin*, though there exists significant distinctions between

these bounded situation types regarding telos. These situations are separated in Vendler's (1967) categories, as Dahl (1981) mentioned in his discussion of boundedness. Vendler (1967: 106) makes a distinction between those situations with a process, Accomplishments, and those without, Achievements (27):

- (27) For accomplishments: *A was drawing a circle at t* means that *t* is on *the* time stretch in which *A* drew that circle.
 For achievements: *A won a race between t1 and t2* means that *the* time instant at which *A* won that race is between *t1* and *t2*.

Since a process takes time (occurs in stages), these two categories are distinguished according to durativity (Smith 1990), and as Tai (1984: 289) shows, the Accomplishments can occur in the imperfective viewpoint (are durative) while Achievements cannot (are instantaneous, or change of state). Intuitively, an event considered to occur in one single action (be punctual) cannot also be described according to internal temporal structure.

The simple verbs of (28-30) are clearly Achievement type since they cannot occur with the progressive *zai*.

- (28) **ta si - zhe*
 3sg die - DUR
 S/He is dying.
- (29) **wo wang zhe wo de fawen*
 I forget PROG I POS french
 I am forgetting my French (I knew).
- (30) **ta zou zhe*.
 3sg walk PROG

However, it is debated (Tai 1984; Smith 1991) whether the situation of the RVC includes an associated process. Tai (1984) shows that the RVCs are not grammatical with the progressive in Mandarin (31):

- (31) (Tai 1984: 292)
 a. *wo zai xue zhongwen*
 I am studying Chinese.
- b. **wo zai xue-hui zhongwen*
 I am learning Chinese.

- (32) (Smith 1990: 319)

⁵ Here, *si* is not a simple verb, but rather an RVC.

- a. Tamen hua-le san nian gai-hao neige qiao.
 he-PL take-LE three year build-finish thatCL bridge
 'They took three years to build that bridge.'

Smith (1990) suggests (32) as proof of durativity, whereas Tai (1984) includes examples such as Smith's (32), discounting them. He (Tai 1984) points to the ungrammaticality of RVC situations with the progressive to prove the instantaneous nature of these situations. This assessment seems the valid one, since (32) probably refers to a period of three years which occurred before the one single moment when the bridge was completed (Huang, p.c.).

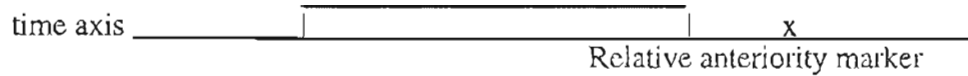
Based on this test, Tai (1984) proposes Mandarin has only three situation types: States, Achievements, and Results. However, as Dowty (1979) clarifies, verb arguments can bound otherwise Activity verbs. States and Activity situation types are unbounded, such that they only allow the inchoative reading with *le*. Clearly, *xie yifeng xin* is an Accomplishment type in that it is bounded, and, occurring with *le*, has a perfective reading. Because an Activity verb may be bounded by arguments of the verb and because these situations are conversationally understood to be complete, these are Accomplishment types. Only the explicit denial of telos establishes these situation types as Activity rather than Accomplishment.

Keeping both Accomplishments and Achievements in mind, we return to Shi's (1989) diagram. Accomplishments, having an associated process, describe the earliest examples of boundedness, *xie yifeng xin* 'write a letter'. Situations described by an RVC, however, are Achievements just as the simple verbs (*si*) seen earlier, which require *le*. The discrepancies between these Achievement situation types are of particular significance and will be discussed in following sections. In the Achievement situation type, the relative anteriority marker refers to the terminal bound as a punctual event. The diagram, then, includes only the instant in which the event occurred (33):

(33)a. bounded situations, Accomplishment: *xie le yifeng xin*

initial boundary

terminal boundary



b. bounded situations, Achievement: *ta si le (ta chi wan le)*



Significantly, (33b) is distinct from the inchoative in that it describes a bounded situation which does not describe the coming into existence of a new situation; rather the termination of one previous. This distinction, between process and punctual event, becomes significant in discussing the unique role RVCs play in double-*le* sentences in that this special focus on the moment of change-of-state suggests *le* is not necessary to mark relative anteriority of the unbounded situation. However, before this we must investigate the role of *le* in unbounded situations.

UNBOUNDEDNESS WITH POSTSENTENTIAL *LE*

According to Chao (1968), postsentential *le* marks a new situation. Li and Thompson (1981: 290) complicate this theory, suggesting five categories for postsentential *le*, marker of their Currently Relevant State: 1) talking about a state that involves a change (34), 2) correcting a wrong assumption (35), and 3) tagging a comment to signal the end of a narrative (36). These three are discussed below though the remaining two categories deserve special consideration and are discussed in the following section.

- (34) wo duzi e le (Li & Thompson 1981: 247)
I stomach hungry CRS
I'm hungry (now).
- (35) (child to mother, who does not think the child wants his/her soda) (Ibid.263)
wo yao he le
I want drink CRS.
(But) I want to drink it. (contradicting the mother's belief)
- (36) (to a friend, as an afterthought after a banquet) (Ibid:283)
wo chi de tai bao le

I eat CSC too full CRS
Let me tell you, I am too full from eating.

Shi (1989) disagrees with Li, Thompson and Thompson (1984) that postsentential *le* is a marker of Current Relative State, suggesting instead, that the relevance is context derivable, and here *le* marks an unbounded situation as relatively anterior. In these examples, omission of *le* changes aspectual meaning (Shi 1989). This is clear in (34), in which *le* refers to the initial bound of the situation. If *le* were excluded, the aspectual meaning would change from the inchoative (ingressive) to describe simply the on-going existence of a state. In (35, 36) noting actual occurrence of the ingressive does act to highlight the existence of the unbounded situation. A speaker will employ *le* if the situation differs from the expectations of the listener (35), or if as in (36) the statement (situation) is new to the conversation and thus worth saying. That is, noting the ingressive of a state known to the speaker to already exist, acts to underscore its existence, though significantly, this emphasis is derived from context not the particle.

According to Li and Thompson (1981), current relevance normally contrasts the time of the event with speech time (37), unless another situation is specified (38). As relative anteriority explains, these unbounded situations are ingressive, that is, anterior to the context, whether speech time or otherwise. Clearly Chao's (1968) label 'new situation' is not an accurate description of the behavior in this instance.

(37) (Li and Thompson 1981: 240)
ta chu – qu mai dongxi le
3sg exit – go buy thing CRS
S/he's gone shopping.

(38) (Ibid: 240)
nei tian ta chu – qu mai dongxi le.
that day 3sg exit – go buy thing CRS
That day s/he went out shopping.

While Li and Thompson (1981) claim these examples show relevance marking, Shi (1989) suggests they are perfective; again, the relevance is taken from the context.

These cases are included in Shi's original argument. (34) is an example of the original schema of an unbounded situation. Because (35,36) present a situation that the

speaker wants to point out to the listener, and does so by referencing the initial bound of the situation, these examples are comprehensive under the relative anteriority theory.

DOUBLE *le* SENTENCES:

Having discussed bounded and unbounded situations, two categories of *le* and Thompson's (1981) postverbal *le* remain. 'Progress so far' (39) and 'Alerting the hearer as to what will happen next' (40) are not simple cases, in that they involve two *le*'s which apparently describe a single situation.

(39) (talking about the 'project' of my living arrangements) (Li & Thompson 1981: 270)
wo zai nali zhu – le liang – ge yue le.
I at there live – PFV two– CL month CRS
I've lived there for two months (now).

(40) wo xi– hao – le yifu le (Ibid.270)
I wash – finish – PFV clothes CRS
I've finished washing my clothes {so now: we can go to the movies; I'm free to play chess with you}.

Without the postsentential *le* these events are grammatical, but the implied meaning has changed. These examples illustrate that postverbal *le* marks the terminal bounds of these bounded situations ((41) bounded for its quantified object and (42) for the RVC) as relatively anterior, resulting in a perfective reading.

(41) wo zai nali zhu – le liang – ge yue.
I at there live – PFV two– CL month
I lived there for two months.

(42) wo xi– hao – le yifu.
I wash – finish – PFV clothes
I finished washing my clothes.

For example, the speaker of (41) may have moved, a sentiment disallowed by (39), which implies the continuance of the situation. While (42) describes the completion of an event, its double-*le* counterpart (40) describes the resultant situation of having completed that process. That is, in each case the postsentential *le* appears to determine relevance to the situation of speech context, which accounts for the difference in meaning between (39) and (41), (40) and (42).

This relevance marking is similar to the perfect aspect, which, according to Comrie (1976: 52), “indicates the continuing present relevance of a past situation.” The Mandarin “perfect” aspect is easily divisible between the two appearances of *le*. Shi proposes the existence of two situations, such that one *le* marks the first situation as relatively anterior and the second marks the resulting situation. These sentences do not imply the end of a process, but rather its continuance because the second situation is unbounded.

Because the relative anteriority marker should not vary in meaning depending on its location in the sentence, double *le* sentences problematize the one-*le* analysis. In his original analysis, Shi (1989a) suggests these two *le* may occur in distinct clauses, which would account for the several possible connotations of (43): the writer will keep on writing, will stop and do something else, and that the speaker implies an excessive sense to the situation (Shi 1989:116). This relationship describes the Mandarin “perfect” as the compound of the two situations marked as relatively anterior. Shi cites the following synonymous examples (43a,b).

- (43)a. Ta yijing xie le sanfeng xin le
 he already write LE three letter LE
 He already has written three letters.
- b. [[Ta yijing xie le] [[you sanfeng xin] le]].
 he already write LE there-be three letter LE
 He already has written three letters.

Here, (43b) attempts to show that the plethora of readings of (43a) is the result of a bounded or unbounded first situation followed by an unbounded situation. If in fact, both are unbounded the reading is Li, Thompson and Thompson’s (1984) “progress so far”(45a). An initial bounded situation gives a “what happens next”(46a) reading.

This claim of compound clauses, however, is impossible with a sentence whose object of the verb is a definite noun phrase (44) or whose verb is non-creative (45,46). As shown below they do not separate successfully.

- (44)a. [[Ta yijing xie le neifeng xin] le]
 he already write LE that letter LE
 He already has written that letter.

- b. * Ta yijing xie le you neifeng xin le.
he already write LE there-be that letter LE
- (45)a. wo zai nali zhu – le liang – ge yue le.
I at there live – PFV two– CL month CRS
I've lived there for two months (now).
- b. *[wo zai nali zhu – le] [you liang – ge yue le.] / [zhu liang ge yue le]
I at there live – PFV two– CL month CRS
I've lived there for two months (now).
- (46)a. [[wo xi– hao – le yifu] le]
I wash – finish – PFV clothes CRS
I've finished washing my clothes {so now: we can go to the movies; I'm free to play chess with you}.
- b. *[[wo xi– hao – le] [[you yifu] le]]
I wash – finish – PFV clothes CRS
I've finished washing my clothes.

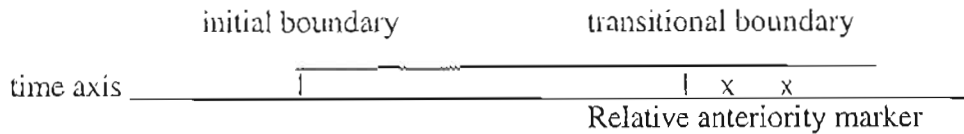
Example (44a) implies the single reading that the accomplishment *write that letter* is complete (*le* + bounded situation) and that the new situation is the existence of that letter (*le* + unbounded situation), because (44a) is a single clause. Example (45a), however, according to Shi (1989) consists of two unbounded situations. While the creation verb *xie* allows for an unbounded result, the existence of *neifeng xin*, the verb *zhu* cannot bring into existence the two months of living.

Shi (1989) attempts to avoid complicating his schemata through separating clausally the two occurrences of *le*. However, the case of *xie le xin* is an anomaly; separability into two clauses is not usual in double-*le* sentences. Rather, in most cases, the first event is bounded and the second, resulting from the first process, is unbounded. In the above sentences this explains the “current relevance” reading, since as we saw in an earlier section, noting the ingressive of a situation has the effect of highlighting an on-going state. The hearer, inferring from context, may note the relevance of the new state.

Between these two situations exists a transitional bound which is necessarily read terminal/initial rather than initial/terminal because as we have seen, the counterpart sentences without postsentential *le* (41–42) have the perfective reading. That is, postverbal *le* marks the anterior terminal bound when the postsentential *le* is removed. Thus, it is the

postsentential *le* that marks the initial bound of the resulting or relevant unbounded situation.

(47) unbounded situations: Perfect or Progress so far, What happens next (39-40)



This schema combines Shi's (1989) original schemata for the bounded and unbounded situations in order to explain this transitional boundary. Though the situations are separate, they are interconnected. This schema (47) represents a compound viewpoint of a single situation which allows all cases discussed in this section. Following Shi's original statement, the remaining information (relevance) is gathered from context.

OPTIONALITY OF POSTVERBAL *LE* IN DOUBLE-*LE* SENTENCES

The removal the postverbal *le* in these double-*le* sentences further suggest the compounding of two situations *le*, creating the unique readings. In most cases, to allow for the various readings of double-*le* sentences both relative anteriority markers are required. This is true with both the Accomplishment situations and with the simple verb Achievement situations (48-49).

(48)a. ta xie le yifeng xin le
 he write LE a letter
 He wrote a letter.

b. *Ta xie yifeng xin le.
 he write a letter LE
 He wrote a letter.

(49)a. ta wang le ta de dizhi le
 3sg forget LE 3sg address LE
 S/He forgot his/her address.

b. *ta wang ta de dizhi le
 3sg forget LE 3sg address LE

As we saw earlier *xie-wan* (RVC Achievement type) is similar to these simple verbs that are inherently Achievements (*si, wang*). However, in this instance they are not perfectly

paralleled; whereas these simple verbs require a postverbal *le*, in a RVC Achievement sentence *le* is optional at superficial structure.

Chu (1976: 49) states there is “synonymy of a resultative complement with or without perfective *le*,” in cases like (50,51) because the implication of actual performance, usually provided by *le*, is provided by the RVC. As discussed earlier, *le* determines actual performance since an event must occur in situation context if its terminal bound is to be relatively anterior. Chu (1976) presents the two pairs below:

(50)a. [[Wo xiewan yifen xin] *le*]. (Chu 1976:48)
I write-finish one-MEASURE letter LE

b. Wo xiewan *le* yifen xin *le*. (Ibid: 49)
I write-finish-LE one-MEASURE letter LE.

I finished writing a letter.

(51)a. Ta zisha (jieguo) si *le*. (Ibid: 48)
he self-kill (result) dead/die LE

b. Ta zisha *le* (jieguo) si *le*. (Ibid: 49)
he self-kill-LE (result) dead/die LE

He killed himself.

Indeed, examples (50,51) suggest that the postverbal *le* is redundant. This unique feature of RVCs may be due to their status as a separate lexical feature, which serves to specifically highlight the terminal bound of the situation, since unlike the inherent Achievement verbs, the RVC Achievement type consists of two lexical items: an activity verb and a Resultative Verb Complement.

However, the Resultative Verb Complement is not the only factor to be considered. As we have seen, this RVC describes the situation, not the relative anteriority status. The post-RVC *le* may only be omitted in the presence of another *le* found postverbally, which does the job of marking the terminal bound as relatively anterior. Example (52) illustrates that the at least one *le* must be present in the RVC Achievement situation given by Chu (1968) in order to maintain original meaning.

(23) a. *ta xie wan yifeng xin. (Huang, pc)
3sg write finish one-CL letter

S/He is to finish writing a letter.

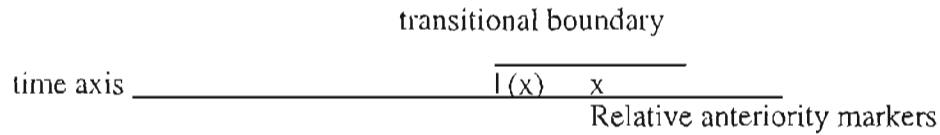
- b. ta xie wan le yifeng xin.
3sg write finish LE one-CL letter
S/He finished writing a letter.

In both sentences, the RVC bounds the situation, though it does not imply actual occurrence. The two-*le* instance has already been explained according to Shi's analysis. However, the single appearance of *le* in Chu's synonymous examples, complicates the one-*le* analysis. If indeed the position of *le* does not change meaning depending on location, (50a) and (52b) should have the same meaning. Yet (50a) carries the inchoative readings of its double-*le* counterpart. As we saw above, the double-*le* sentence carries implications which the sentence with only postverbal *le* does not (52b).

A crucial possibility is that postverbal *le* may in fact signal relative anteriority from underlying structure in the double-*le* sentences. In this case, these sentences would be no different from the previously discussed double-*le* sentences. Again, this is a problem for Shi's theory which does not distinguish two *le*'s. However, the omission from superficial structure is telling of an RVC's implications. Indeed, the terminal bound, inherent in the simple Achievement verb, does not highlight the terminal bound to a satisfactory degree to warrant the optionality of the postverbal *le*⁶.

Previously, we have seen the transitional bound of the double-*le* sentences in Mandarin. Though Shi (1989) uses the two original schemata to separately depict the conjoined situations, this article suggested combining the schemata. Examining the above double-*le* sentences introduced by Chu (1976), it becomes apparent that indeed these two situations depict a single aspectual schema, in that they create an interdependent context, as suggested for the double-*le* sentence (47). The RVC highlights the terminal bound of the first process, and the postsentential *le*, in referring to a resulting ingressive bound, confirms the existence of this terminal bound even as it becomes the initial bound (53). The compound schema (53) illustrates the optionality of *le*.

(53) bounded event, unbounded result: *wo xiewan (le) yifeng xin le*.



This role of sentential *le* in double-*le* sentences to seemingly bound the situation is not in fact bounding as it has been argued here. It must be noted that the bounding is being done by another feature, the RVC. As Shi (1989) predicts *le* marks relative anteriority of the bound. Because on the above aspectual schema, the terminal bound created by the RVC is the initial bound of the resulting situation, only one *le* is needed.

HIGHLIGHTING THE BOUND: IMPLICATION OF ACTUAL PERFORMANCE

We have thus argued that the second *le* in a double-*le* sentence marks relative anteriority of the resulting situation. This relationship of situations on a single aspectual line can be further clarified by comparison with explicit sequential events. For example, the case of *wo li fa* is bounded by context (54-56). Intuitively, to cut one's hair normally refers to a bounded situation, suggesting example (54) has only a perfective reading. For some, this sentence may seem odd. If so, this too supports Shi's argument that *le* does not serve to bound the situation. Li and Thompson (1981) claim (55) is currently relevant, the "what happens next"; this is what Shi has explained to be a bounded situation followed by an unbounded resulting situation of having cut one's hair. The last example, is strikingly similar to the double-*le* sentence.

(54) (Li & Thompson 1981: 200)
 (?)wo li le fa.
 I cut LE hair
 I had a haircut.

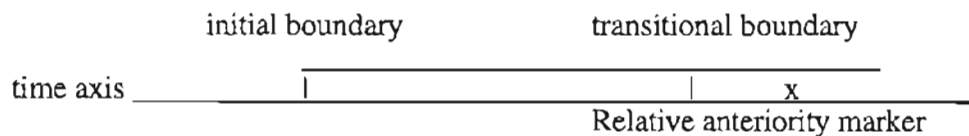
(55) (Ibid: 201)
 wo li le fa le
 I cut LE hair LE
 I (have) had a haircut.

⁶ The obligation of *le* with the simple Achievement verb may also be due to prosody rules of Mandarin. This is unfortunately, beyond the scope of this article.

- (56) (Ibid: 201)
 wo li le fa jiu qu sanbu
 I cut LE hair then go take:walk
 I will take a walk as soon as I finish my haircut.

According to Li and Thompson (1981), (54) “becomes perfectly acceptable in contexts where it is followed by another clause, as in [56], or where it occurs with *le*, signalling ‘currently relevant situation’, as in [55].” The sense of “completion” given by the explicitly stated following situation is akin to the inchoative in the one-*le* analysis, marked by postsentential *le*. This supports the hypothesis that the final *le* marks relative anteriority of a situation in the double-*le* framework. Li and Thompson suggest the sentential *le* bounds the situation, going from (54) to (50). This is a complicating extension of the relative anteriority marking role, since, in referencing a resultant situation, the sentential *le* implies completion of the first. This might simply be explained, however, that the second event changes the context of the first; again, this would support Shi’s claim that boundedness is sometimes context-derivable.

- (57) bounded event, unbounded result: *wo li le fa jiu qu sanbu.*



Having established the role of the postsentential *le* in the double-*le* sentences as relative anteriority marker of the resultant situation, we return to the unique role of the RVC in the same sentence context. Notice that the RVC *wan* bounds the first situation in each example (58-61).

- (58) wo kan wan le bao jiu shui
 I read finish LE paper then sleep
 I will go to sleep after I finish reading the paper.
- (59) wo kan wan bao jiu shui
 I read finish paper then sleep
 I will go to sleep after I finish reading the paper.
- (60) wo wang le ta de dizhi, gei ta da dian hua
 I forget 3sg LE DE address, give him call phone
 After I forgot his/her address I called him/her.

- (61) *wo wang ta de dizhi, gei ta da dian hua
 I forget 3sg DE address, give him call phone
 After I forgot his/her address I called him/her.

While (58) suggests postverbal *le* remains at underlying structure, we have already seen in the case of double-*le* sentences, that its omission at superficial structure is significant. The simple Achievement verbs again do not make *le* optional from the first situation (60-61). This case supports the claim that the postsentential *le* in double-*le* sentences, indeed describes a second situation (*jiu shui* or *gei ta da dian hua*).

The examples of this section suggest that the role of postsentential *le* in double-*le* sentences is indeed marking a resulting situation, a distinct situation, creating an inchoative reading. This supports Shi's relative anteriority hypothesis deconstructing the Mandarin perfect aspect into two situations each marked as relatively anterior by the particle *le*.

AMBIGUOUS *LE*

Ambiguity of *le* is usually reserved for sentences such in which *le* occurs postsententially and the situation, in proper context, may be either bounded or unbounded. These examples support the claim that the status of boundedness, not *le*, determines whether the situation is viewed as perfective or inchoative. For examples (62,63), the precise meaning (that is, the situation type information) is inferred through context.

- (62) (Shi 1989: 114)
 ta ku le
 3sg cry LE
 S/He (has/had) cried. S/He starts/started to cry. S/He now cries
- (63) (Ibid: 96)
 ta lai le
 3sg come LE
 S/He came. S/He has (had) come. He's coming. He now comes
- (64) (Shi 1989: 115)
 ta zhidao le
 3sg know LE
 He knows (now).
- (65) (Ibid: 115)
 ta si le
 3sg die LE

He died.

Examples (64,65) illustrate instances in which the nature of the verb may provide the situation type information. If describing an event which occurred ten years ago, clearly the event must have ended (Shi 1989); if the crier has never cried previously, clearly the reading is the habitual sense of the inchoative; or otherwise, these sentences may be understood to describe a token event of the inchoative. In (64,65) the nature of the verbs make the inchoativity of (64) and the perfectivity of (65) irrefutable. While this phenomenon of contextual influence problematizes the two-*le* theory, it supports Shi's claim that *le* marks relative anteriority regardless of sentential location and for both bounded and unbounded situation type.

Another case for ambiguity are cases in which one *le* carries both perfective and inchoative meanings. This is a case not handled in Shi's (1989a) article, however it supports the relative anteriority theory.

(66) (Li & Thompson 1981: 252)
wo de beizi zha le.
I CSC cup crack PFV/CRS
My cup cracked.

(67) (Ibid: 252)
lingzi si po le.
collar tear break PFV/CRS
The collar tore.

According to Li and Thompson (1981: 251), this case of ambiguity only obtains with "adjectives with an inherent end point as part of its meaning... used to convey a change of state." Yet this recalls highly the optionality of post-RVC *le* in double-*le* sentences. The simple verb Achievement type in (66) and the RVC Achievement in (67) bound the situations. Both sentences are marked as relatively anterior by the single *le*. In this case, the two possible location for *le* are the same such that only one may be present. While scholars of the two-*le* theory cite Chao's (1968) discussion of *le le* → *le* haplology, Shi's theory makes no need for this absorption.

The final case of ambiguity arises from Shi's theory, weakening its case for the above perfective/inchoative (perfect) sentences. In the following examples, one relative aspect marker appears, and the situations are seemingly identical; yet, (68) has a perfective reading and (69) the inchoative.

(68) ta xie le xin.
3sg write LE
S/He wrote a letter/ the letters.
*S/He wrote letters.

(69) ta xie xin le.
3sg write letter(s) LE
S/He writes letters now (but not before now).

Previously in this article, the perfectivity of (68) is explained in that following a verb of creation, the direct object is determined. However, this cannot be the case (69) because it has the inchoative reading. The fine points of difference may vary from person to person, which makes this point especially confused. Shi might argue the difference in boundedness is determined by context, which would explain all various meanings these two similar sentences might have. This hypothesis appears weak, however, and deserves more attention.

EXCESSIVE *le*

Situations with excessive *le* appear to be neither bounded or unbounded situation types, but rather, expressions of surprise regarding the situation.

(70) Tang (tai) xian le
soup (too) salty LE
The soup is too salty

Shi (1989) suggests the excessive case of *le* is merely an extension of the temporal sense. Indeed, this is not the first case in which the speaker uses *le* to describe a situation as divergent from expectations. Though the situation is not indeed ingressive, the reference to the initial bound acts to emphasize the fact of its status as already on-going (71)

(71) Someone responding to the hostess' claim that s/he is not taking any of the food offered to him/her (Li, Thompson and Thompson, 1984: 33)

wo he qishi le
I drink soda LE
(But) I have been drinking soda.

Although the case of excessive *le* cannot be explained temporally since the status of the soup being too salty and the guest drinking soda is not inchoative. This is an inverse use of the particle, such that signaling the inchoative results in an opposite meaning, i.e. that the state is on-going.

CONCLUSION

In exploring the relative anteriority theory, the complexity of this issue is all too apparent. Shi's (1989) argument is appealing in its simplicity and efficiency. Though it is not all-encompassing, this article illustrates its high degree of accuracy. This article has found the deconstruction of perfectivity and inchoativity justified, even as it leaves questions unanswered. It is a great improvement in theory, however, from the perfective-aspect marker and inchoative/current relevance marker dichotomy.

The double-*le* sentences can be understood as separate situations related in that one is the result of the first. Though the ambiguous *le* remains such, the relative anteriority marker begins to answer some questions. The excessive *le* neither refutes Shi's (1989) claim, but rather suggests a metaphorical extension on the concept of relative anteriority. This article showed relative anteriority's implication of actual occurrence, which helps explain the current relevance described by Li, Thompson and Thompson (1984).

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