

## PERFECTIVITY IN MANDARIN<sup>1</sup>

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0. Introduction. The concept of perfectivity plays an important role in the grammar of Chinese, as it does in that of many other languages<sup>2</sup>. In this paper we would like to (1) contrast the way the perfective aspect manifests itself in Mandarin with the way it is used in the grammars of other languages in which it has been described, and (2) show that certain facts about perfectivity in Mandarin can be predicted on the basis of universal considerations of transitivity.

Before we can discuss the ways in which the semantic category of 'perfective' differs in Mandarin from its use in other languages, we must explicitly show how it is manifested in Mandarin.

### I. A 'bounded' event

Perfective aspect is typically taken to be that aspect category used when an event is viewed in its entirety without reference to its internal temporal constituency (see Comrie (1976), for example). One circumstance in which an event is viewed in its entirety is when it is bounded, either temporally, spatially, or conceptually, and it is this notion of boundedness which seems to play a central role in defining perfectivity in Mandarin.

There are essentially four ways in which events can be bounded: when the event is (i) a 'quantified' event, (ii) a definite or specific event, (iii) inherently bounded because of the meaning of the verb, (iv) the first event in a sequence. We will show below that the use of -le, the perfective aspect marker in Mandarin, can be understood in terms of boundedness. We will discuss each of the four types of boundedness in turn.

1. A 'quantified' event. Sentences in which an event is limited by explicit phrases specifying the amount of time an event took or the number of times an event happened will typically occur with -le. For example.

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<sup>1</sup> This paper contains some material from Chap. 7 of Li and Thompson (1981), but presents it in terms of more general issues of aspect in Universal Grammar.

<sup>2</sup> The imperfective member of the opposition is manifested by a pair of morphemes zhe/zài, the former used for states, the latter for actions. For discussion, see Teng (1979) and Li and Thompson (1981).

- (1) tā shuì - le sān - ge zhōngtóu  
3sg sleep - PFV three - CL hour  
S/he slept for three hours.
- (2) wǒ zài nàlǐ zhù - le liǎng - ge yuè  
I at there live - PFV two - CL month  
I lived there for two months.
- (3) yǐjīng rěn - le zhèma duō nián, wǒ huì rěn - xiàqu  
already endure-PFV that many year I likely more endure-continue  
I have already put up with it for so many years, I can go on enduring it.
- (4) wǒ bǎ gǒu dǎ - le yī - dùn  
I BA dog hit - PFV one-CL  
I gave the dog a beating.
- (5) wǒ bǎ mén tī - le sān - jiǎo  
I BA door kick - PFV three-foot  
I gave the door three kicks.
- (6) dírén wǎng hòu chètùì - le èr - shí - lǐ  
enemy toward back retreat - PFV two - ten - mile  
The enemy fell back twenty miles.
- (7) nǐ gāo - le yīdiǎn  
you tall - PFV a:little  
You've gotten taller.
- (8) tā zuótiān lái - de wǎn - le yīdiǎn  
3sg yesterday come-NOM late - PFV a:little  
Yesterday s/he came a little late.
- (9) jīntiān gǔpiào hángshì dī - le yīdiǎn  
today stock market lower-PFV a:little  
The stock market fell slightly today.

Sometimes the quantified event is a state whose limits are set by a phrase expressing the extent to which the subject is in that state. Sentences (10) and (11) are illustrations of bounded states:

- (10) zhèi - ge dìfang bù cuò, jiùshì chǎo - le yīdiǎn  
this - CL place not bad just noisy - PFV a:little  
This place is OK, it's just a little noisy.
- (11) tā niánji bǐ wǒ dà - le jǐ - shí - suì  
3sg age COMP I great-PFV several-ten-years  
S/he was/is older than I by a few decades.

The following are examples each of which can have two interpretations, depending on whether the adjective describes a process or a state:

- (12) a. (Discussing how a friend has changed since his/her last visit)  
tā pàng - le yīdiǎn  
3sg fat - PFV a:little  
S/he's gotten a little fatter.
- b. (Talking about candidates for our volleyball team)  
tā pàng - le yīdiǎn  
3sg fat - PFV a:little  
S/he's a little (too) fat.
- (13) a. (Talking about a laundry mishap)  
zhèi-jian chènshān xiǎo - le sān cùn  
this-CL shirt small - PFV three inch  
The shirt got smaller (i.e., shrank) by three inches.

b. (Trying on clothes)

zhèi-jian chènshān xiǎo - le sān cùn  
this-CL small-PFV three inche  
This shirt is (too) small by three inches.

Sentence (14) provides a good illustration of the contrast between just "naming" an event and presenting it as a unified whole by "quantifying" it:

- (14) Zhāngsān zài bówùguǎn ménkǒu dèng Lǐ-sì, dèng - le sānshí fēnzhōng  
Zhangsan at museum entrance wait Li-si wait - PFV 30 minute  
Zhangsan waited for Li-si at the entrance to the museum for 30 minutes.

The first mention of dèng 'wait' is not presented as an event viewed in its entirety but simply names the event; it cannot take -le. The second mention of the verb, however, quantifies the waiting and presents it as a whole event with boundaries; here -le is required.

Similarly, an event with a specified quantity of the direct object will also typically occur with -le because the quantified direct object serves to bound the event. For illustration, consider sentences (15) - (22) in which the quantified direct object is underlined:

- (15) tā shuō zuì jìn dàxué gài - le bu shǎo xīn sùshè  
3sg say most recent univ. build-PFV not few new dormitory  
S/he said that the university had recently built many new dormitories.
- (16) nèi - ge jǐngchá duì wǒ xíng - le yí - ge lǐ  
that - CL policeman to I perform-PFV one - CL salute  
That policeman saluted me.
- (17) tā jīntiān mǎi - le hěn duō shū  
3sg today buy - PFV very many book  
S/he bought a lot of books today.
- (18) tā zài miànbāo - shàng mǒ - le yídiǎn niú - yóu  
3sg at bread - on spread-PFV a:little cow - oil  
S/he spread a little butter on the bread.
- (19) wǒ fá - le tā wǔ kuài qián  
I fine - PFV 3sg five dollar money  
I fined him/her five dollars.
- (20) tāmen fá - le wǔ - shí - fèn qǐngtiē  
they issue-PFV five - ten - CL invitation  
They sent out fifty invitations.
- (21) zhèi - cì kǎoshì wǒ dé - le bā - shí fēn  
this - time exam I obtain-PFV 8 - 10 point  
I got 80 points on this exam.
- (22) qiáng-shàng guà - le yí - fú huà  
wall - on hang-PFV one - CL - painting  
A painting (was hung/had been hung) on the wall.

(23) is an interesting and very typical example with -le in which the amount of time spent is expressed grammatically by quantifying the direct object of the verb-object compound tán-tiān 'discuss-universe = chat':

- (23) wǒmen tán - le yí - yè de tiān  
we chat PFV one-night NOM universe  
We talked all night.

where the message being communicated has to do with bounding an event by naming a specific quantity of the direct object. But it is crucial to notice that speakers can differ in their judgements about how much a quantified direct object serves to bound an event. For example, with a sentence such as (24), some native speakers feel that -le is not necessary, i.e. they don't feel strongly that the quantified direct object, yí - ge hěn kě - ài de xiǎo māo 'a very lovable little cat' renders the event bounded, while some native speakers feel that when -le is used, (24) represents the beginning of a sequence of utterance about the small cat; in other words, they view the event as bounded not because of the quantified direct object but because of the event being the first in a sequence (see I.4 below). Of course, many native speakers feel that sentence (24) is fine as it stands, i.e., they view the event as bounded because of the quantified direct object.

- (24) tā jiā yǎng - le yí - ge hěn kě - ài de xiǎo māo  
 3sg home raise-PFV one - CL very can-love NOM small cat  
 His/her family had a very lovable little cat.

A recent experiment makes this point nicely.<sup>3</sup> A story containing the following sentence was presented to 62 Mandarin-speaking subjects. The author of the story had written the sentences with the -le, but only 1/3 of the subjects thought it was necessary:

- (25) hūrán zǔfù xū - le yì kǒu qì  
 suddenly grandfather heave-PFV one-mouth air  
 Suddenly, grandfather took a breath.

What this example shows is that speakers can have different views about how bounded an event is, and this will determine whether or not they decide to use -le in certain situations. Those who would use -le in sentence (25) feel that it is important to the message conveyed by the sentence that what grandpa did was to take "one" breath, while those who wouldn't use -le here feel that the fact that he took a breath is more important than the breath itself.

2. A definite or specific event. An event will also often qualify as bounded if the direct object is a definite noun phrase, that is, if the noun is a name or a pronoun, or is preceded by certain modifiers. Once again, whether or not -le is used depends on the extent to which the event is judged to be bounded. Here is an example showing each of these types of definite direct objects:

Name

- (26) wǒ pèngdào - le Lín Huì  
 I run:into - PFV Lin Hui  
 I ran into Lin Hui.  
 (where the important information in the context is who you ran into)

Pronoun

- (27) nǐ huǐ - le nǐ zìjǐ  
 you ruin-PFV you self  
 You destroyed yourself.

<sup>3</sup> See Spanos (1977), (1979) for extensive discussion of speakers' variation in the use of -le. Example (20) is taken up on pp. 61-64 of Spanos (1977).

### Genitive Modifier

- (28) tā ráo - le tā - de dírén le  
3sg spare - PFV 3sg-GEN enemy CRS<sup>4</sup>  
S/he spared his/her enemy.

### Demonstrative modifier

- (29) wǒ xiǎng - chū - lái le nèi - ge zì  
I think - out - come-PFV that CL-character  
I remembered that character.

### Relative Clause Modifier

- (30) a. nǐ zěmma zhīdào Shànghǎi yǒu yí - qiān - wàn rén?  
you how know Shanghai exist one-thousand-10,000 person  
How do you know Shanghai has 10 million people?  
b. yīnwèi wǒ kàn - le xīn - de zīliào  
because I see - PFV new - NOM material  
Because I have seen the new figures.

Here is another example from Spanos (1977:45), which shows another way in which -le signals the specificity of an event.

- (31) tā wèn wǒ zuótiān wǎnshàng zuò (-le) shénma?  
3sg ask I yesterday evening do - PFV what  
S/he asked me what I did last night.

In this sentence, out of 39 speakers asked, only 7 thought the -le should be there, while 32 felt it should not. But once again, speakers' judgements on this question depend crucially on the nature of the message they imagine the sentence is conveying. With -le the event is viewed as bounded, and thus as specific; the subject of the sentence, tā, was asking for a specific list of activities the speaker of the sentence engaged in, as if tā were a nurse in charge of making sure the speaker didn't do too much. Since this is a rather unusual speech context, it is no wonder that only 7 people out of 46 thought -le should be used. Without -le, on the other hand, the sentence is quite neutral and implies that tā was just making casual conversation. Since this latter case corresponds to a very natural situation, it is reasonable that the majority of speakers would think of this as the most natural context for this sentence and would judge that it should have no -le.

The "rule" concerning the use of -le in sentences such as those we have been discussing, then, can be seen to depend on what the speaker judges to be the important information the sentence is conveying in the context in which it is used. The reason that speakers disagree when they are presented with sentences in isolation is because they have to imagine what the real conversational situation might be, and they might come to different conclusions on this point. The rule that they actually use in talking to each other is simply this: When the overall conversation makes it important to emphasize the information in the definite direct object, either because you want to go on talking about it or because it contrasts with some other possible item which could have been mentioned, -le must be used.

3. Verbs with inherent bounded meaning. Some verbs represent specific, bounded events by virtue of their very meaning. One such verb is sǐ, 'die',

4 "CRS" = "Currently Relevant State". See Li and Thompson (1981) and Li et al (1982) for discussion of sentence-final le.

which has its end point built into its meaning. Another such verb is wàng 'forget':

- (32) tā qùnián sǐ - le  
3sg last:year die-PFV  
S/he died last year.  
(33) wǒ wàng - le tā - de dìzhǐ  
I forget-PFV 3sg - GEN address  
I forgot his/her address.

We should notice that the inclusion of the "end point" in the meaning of such verbs as sǐ and wàng 'forget' is a language-specific fact of Mandarin, not a universal feature of all languages of the world. For example, the English verb "die" does not have the end point of dying included in its meaning, and, therefore, it is possible to use the verb in a durative aspect as shown in (34):

- (34) S/he is dying.

Because of the inclusion of the end point of dying in the meaning of the Mandarin verb, sǐ 'die', it cannot occur in the durative aspect, and sentence (35), the Mandarin counterpart of sentence (34), is unacceptable:

- (35) \*ta si - zhe  
3sg die - DUR

For the same reasons, the English verb, 'forget', may, and its Mandarin counterpart, wàng, may not occur in the durative aspect as shown by the acceptable English sentence (36) and the unacceptable Mandarin sentence (37):

- (36) S/he is forgetting his/her French.  
(37) \*tā wàng - zhe tā - de fǎwèn  
3sg forget - DUR 3sg - GEN French

We now understand why verbs such as sǐ 'die' and wàng 'forget' always occur with the perfective aspect marker -le.

Further examples in which the inherent meaning of the verb specifies its own end point are given in sentences (38) - (41). Such verbs require some mark of perfectivity:<sup>5</sup>

- (38) huǒ miè - le  
fire go:out-PFV  
The fire went out.  
(39) gài zi diào - le  
lid fall:off-PFV  
The lid fell off.  
(40) zhèi - ge yǐ zi huài - le  
this - CL chair broken-PFV  
This chair broke.

<sup>5</sup> Except when they occur in irrealis modes, as in

- (i) tā yào sǐ  
3sg want die  
S/he wants/wanted to die.

- (41) zhàdàn zhà - le  
 bomb explode-PFV  
 The bomb exploded.

4. **First event in a sequence.** Sometimes an event is bounded by being the first event in a sequence, where what is important is that after one event has taken place, another one happens. In such cases, the first event is of interest as an unanalyzed whole: the speaker signals that its occurrence is bounded by the subsequent event. In these instances -le is used, and the sentence can often be translated with 'after', 'when', or 'now that' in English.

- (42) wǒ chī - wán le nǐ chī  
 I eat - finish - PFV you eat  
 After I have finished eating, then you eat.
- (43) wǒ kàn - wán - le bào, jiù qu shuì  
 I read-finish paper then go sleep  
 When I finish reading the paper, I will go to sleep.
- (44) tā shuō de hěn qiǎomiào, ràng rén tīng - le bu huì shēngqì  
 3sg say EXT very skillful, let person hear-PFV not likely angry  
 S/he talks very skillfully so that when people hear him/her they don't get angry.
- (45) zěmma pèng - le bēizi yě bu hē?  
 how bump - PFV glasses also not drunk  
 How come after have touched glasses, you still don't drink?
- (46) chū - le zhèi - ge jiǎncháshì, wàitou jiù yǒu yínháng guǎitai  
 exit - PFV this - CL customs:area outside then exist bank counter  
 When you go out of this customs area just outside there is a bank counter.
- (47) yǒu - le nèi - ge rìguāng - dēng, chúfáng jiù liàng duō le  
 exist-PFV that-CL florescent-light kitchen then bright much CRS  
 Now that (they) have that florescent light, the kitchen is much brighter.
- (48) tā kāi - le mén, nǐ jiù jìnqu  
 3sg open-PFV door you then in-go  
 When/If s/he opens the door, you go in.
- (49) wǒ pào - le chá hē  
 I brew - PFV tea drink  
 I made some tea to drink.
- (50) wǒ-de yǎnjīng yǒu máobīng, kàn-duō-le shū, jiù bu shūfu  
 I-GEN eye exist trouble, see-much-PFV book then not comfortable  
 I'm having trouble with my eyes; after I've read a lot they don't feel good.

Sentences (43), (45), and (48) show that the direct object doesn't need to be quantified in the first event in a sequence for -le to appear. But this raises an interesting question: there is often something strange and "unfinished" about a sentence containing -le and a simple unquantified object noun. So, by themselves, sentences like

- (51) wǒ lǐ - le fǎ  
 I cut - PFV hair  
 I had a haircut.

- (52) ʔwǒ hē - le chá  
 I drink-PFV tea  
 I drank tea.

seem incomplete and difficult to interpret. The reason for this is not hard to understand: a simple unquantified noun object is non-definite and non-specific, and normally a simple verb phrase with such an object is not bounded. That is why such sentences need to be bounded by the addition of (i) a following clause or (ii) a le at the end marking 'Currently Relevant State'. So, for example, (51) becomes perfectly acceptable in contexts like the following where (53) provides a following clause, and (54) has the sentence-final particle le signaling 'Currently Relevant State' added to the original clause.

- (53) wǒ lǐ - le fǎ jiù qù sànbù  
 I cut- PFV hair then go take:walk  
 I had a haircut and then went for a stroll.  
 (54) wǒ lǐ - le fǎ le  
 I cut-PFV hair CRS  
 I had a haircut.

Sometimes, in the right context, an adverbial expression can serve the function of bounding the event. For example, in a situation where the issue is when he got a haircut, sentence (55) could be used; similarly, if it is known that he got rich, but the issue is where, then sentence (56) would be appropriate:

- (55) tā zǎoshang lǐ - le fǎ  
 3sg morning cut-PFV hair  
 S/he got a haircut in the morning.  
 (56) tā zài jiāzhōu fā - le cái  
 3sg at Calif. issue - PFV wealth  
 S/he got rich in California.

The important point to be drawn from this discussion is that understanding the grammar of a sentence always involves understanding how that sentence relates to the context in which it occurs; whether a sentence expresses a bounded event or not depends to a certain extent on the nature of the conversation of which that event is a part.

So far we have seen that the conditions for the use of -le are quite straightforward: -le is used when an event denoted by a sentence is perfective, or bounded, and an event is bounded if (i) its temporal or spatial limits or its direct object is specified, or (ii) it is followed by another event.

**5. Transitivity.** All of these four types of expressions of boundedness can be explained in terms of a universal theory of Transitivity (see Hopper and Thompson (1980)). According to this theory perfectivity is one of the marks of foregrounded material in discourse, including main story-line events in narrative, and other action-oriented clauses in conversation. In such clauses languages tend to show grammaticized correlations between perfectivity, highly individuated objects (including specific and definite ones), punctual actions, and highly potent agents. Thinking of Transitivity as a continuum, we could regard such clauses as being very high in Transitivity. In universal terms, then, we can explain the obligatoriness of the perfective -le (or a perfectivizing expression (see Section II.1 below)) with quantified objects and



amount/extent phrases with punctual verbs whose inherent meaning includes boundedness, and the use of -le in sequential clauses, as in:

- (57) wǒ chī - le jiù zǒu  
I eat - PFV then leave  
I'll leave after I eat.

as well as the implication that a clause like (58) is not complete by itself:

- (58) wǒ hē - le chá ...  
I drank-PFV tea ...

The explanation is that foregrounded clauses in discourse tend not only to be perfective, but also tend to represent events in the order in which they happen in our experience, hence the use of a marker of perfective aspect as a signal of the sequentiality of events.

In these terms, too, we can also characterize the use of the 'object marker' bǎ: the more definite the object and the more perfective the verb, the more likely bǎ is to be used. That is, bǎ tends to be found, with the perfective, in highly Transitive clause types. Thus, clauses such as those in (59) - (64) are exemplary bǎ sentences; all have perfective verbs and definite objects:

- (59) kuài yidiǎn bǎ zhèi - ge ròu ná - zǒu  
fast a:little BA this - CL meat take - go  
Take this meat away quickly!
- (60) tā yòu bǎ tā - de yìsi jiǎng - chu - lai le  
3sg again BA 3sg - GEN meaning talk - out- come CRS  
S/he again explained what s/he meant.
- (61) tā bǎ fàntīng shōushi - gānjing LE  
3sg BA dining:room tidy:up clean PFV/CRS<sup>6</sup>  
S/he tidied up the dining room.
- (62) wǒ bǎ yǐzi pèng-le yixia  
I BA chair bump-PFV once  
I bumped into the chair.
- (63) wǒ jīntiān bǎ sān-běn shū dōu mài LE  
I today BA 3-CL book sell PFV/CRS  
I sold all three books today.
- (64) tā bǎ shénme dōu chī-guāng LE  
3sg BA what all eat-empty PFV/CRS  
S/he ate up everything.

Clauses with indefinite and non-specific objects ((A)) or with non-perfective verbs, ((B)) on the other hand, generally do not take ba:

- (A) (65) \*tā bǎ Rìběn-huà shuō LE  
3sg BA Japan-talk speak PFV/CRS  
(S/he speaks Japanese.)
- (66) \*tā bǎ liǎng - ge rén shā LE  
3sg BA two-CL person kill PFV/CRS  
(S/he killed two people.)

<sup>6</sup> In sentence-final position, a LE morpheme may be a haplologized realization of both the perfective -le and the CRS sentence-final le. Such cases are spelled LE and glossed with both glosses, as shown in (61).

- (B) (67) \*táo-shù bǎ huā kāi LE  
 peach-tree BA flower open PFV/CRS  
 (Peach trees put forth blossoms)
- (68) \*tā bǎ xiǎo māo ài  
 3sg BA small cat love  
 (S/he loves the kitten)
- (69) \*tā bǎ nǐ hěn xiǎng  
 3sg BA you very miss  
 (S/he misses you very much)
- (70) \*wǒ bǎ nèi-jian shìqing liǎojiě  
 I BA that-CL matter understand  
 (I understand that matter)
- (71) \*tā bǎ Zhāngsan kàn-dào LE  
 3sg BA Zhangsan see-arrive PFV/CRS  
 (S/he was able to see Zhangsan)
- (72) \*tā bǎ nèi-ge xiāngzi xǐ - de - gānjing  
 3sg BA that-CL chest wash - can - clean  
 (S/he can wash that chest clean)

These claims are confirmed dramatically by a study of bǎ sentences in colloquial essays, stories, and speeches.<sup>7</sup> Out of 83 bǎ sentences, there were none whose verbs were reduplicated, and only one whose verb was followed by -zhe. On the other hand, 33 of the 83, or 40%, ended with a directional suffix such as xià 'down' or qǐ-lái 'come up', as in:

- (73) nǐ kuài qu bǎ tāmen jiào - qǐ - lái  
 you fast go BA they call - up - come  
 Go quickly to rouse them up.

and 23 of the 83, or 28%, contained a directional expression, as in:

- (74) Lǐsì bǎ Lǚsù qǐng dào chuán-lǐ  
 Lisi BA Lusu invite to boat-in  
 Lisi invited Lusu inside the boat.

Thus, a total of 68% of the bǎ sentences in this sample occurred with a 'perfectivizing expression' (again, see II.1 immediately below).

In an even more dramatic way, the results of the study correlate with what we have said about the definiteness of the object: all of the 83 bǎ sentences had definite objects.

The numbers arrived at in this study of bǎ in real contexts provide striking confirmation of the two factors which we have said control the use of bǎ: the more specific or definite the object is, and the more strongly the sentence expresses perfectivity, the more likely the message is to be expressed in the form of a bǎ construction.

## II. Perfective contexts with no -le

1. **Perfectivizing expressions.** Often the conditions for the use of perfective -le would appear to be satisfied, yet no -le appears. For example, here are four sentences expressing bounded events viewed in their entirety, yet none has -le:

<sup>7</sup> This study was carried out by Grant Goodall.

- (75) tā cóng fángzi - lǐ zǒu dào Zhāngsan nàr  
 3sg from house - in walk to Zhangsan there  
 S/he walked from his/her house over to Zhangsan's place.
- (76) wǒ bǎ shǒubiǎo fàng zài chōuti - lǐ  
 I BA watch put at drawer - in  
 I put the watch in the drawer.
- (77) wǒ jì gěi tā yì - fēng xìn  
 I send to 3sg one - CL letter  
 I sent him/her a letter.
- (78) wǒ xiào de zhàn - bu - qǐ - lái  
 I laugh EXT stand - not - up - come  
 I laughed so hard I couldn't stand up.

Why do these sentences have no -le?

The answer is that each of these sentences contains another element which does the job of 'perfectivizing' the verb. That is, each of the underlined morphemes or phrases in the above sentences performs the same function that -le does signaling that the event is to be viewed as a complete whole. The difference between -le and these underlined elements is that the latter perform their perfectivizing function by virtue of their inherent meanings. In (75) - (77) their perfectivizing expressions are the directional phrases dào Zhāngsan nàr 'to Zhangsan's place', zài chōuti-lǐ 'in the drawer', and gěi-tā 'to him/her', which put boundaries on the events of walking, putting and sending by specifying their spatial limits. In (78) the perfectivizing expression is the extent phrase de zhàn-bu-qǐ-lái 'so much that I couldn't stand up'.

2. -le in imperatives. Most of the time, imperatives do not have -le:

- (79) ná nǐ - de wàiyī  
 take you-GEN coat  
 Get your coat!
- (80) nǐ shāo zhèi - dùn fàn  
 you cook this - CL meal  
 You make the meal!
- (81) dì gěi wǒ nèi - ge tiaoōng  
 hand to I that -CL spoon  
 Hand me that spoon!

In negative imperatives, with bié 'don't', it is also normal not to find -le, as (82) - (84) show:

- (82) bié guān mén  
 don't close door  
 Don't close the door.
- (83) bié jiā jiāngyóu  
 don't add soy sauce  
 Don't add the/any soy sauce.
- (84) bié dào chá  
 don't pour tea  
 Don't pour tea.

However, there is one type of situation which -le must be used in a negative imperative, and that is when the imperative is a "warning" to the listener:

- (85) bié pèng - le lúzi  
 don't touch - PFV stove  
 Don't touch the stove!
- (86) bié zhuàng - le gǒu  
 don't run:into-PFV dog  
 Don't run into the dog!
- (87) bié tūn - le niúǎi  
 don't swallow-PFV milk  
 Don't swallow the milk!

The contrast can be seen clearly if we look at pairs of negative imperatives with and without -le:

- (88) a. bié qiān - míng  
 don't sign - name  
 (You) don't (need to) sign your name.
- b. bié qiān - le míng  
 don't sign - PFV - name  
 Don't sign your name (I'm warning you!)

(88)b. means 'watch it, something bad will happen if you sign your name'. Similarly, in :

- (89) a. bié xuǎn nà - táng kè  
 don't select that-CL course  
 Don't take that course (= I wouldn't bother if I were you).
- b. bié xuǎn - le nà - táng kè  
 don't select-PFV that-CL course  
 Don't take that course (you'll be sorry if you do).

Now, why is it that -le has the effect of making the negative into a warning? The reason has to do with the sequencing function of -le, which we have discussed above in Section I.4. An event in a negative imperative by itself is not a likely candidate for a bounded, or perfective, event, since the speaker is actually urging that it not happen. So we should expect never to find -le in negative imperatives. When -le does occur, however, we know that, since the event can't be bounded in and of itself, it must be bounded by a following event, which may or may not be expressed, but which is always understood. So, to take (89)b., for example, a possible following clause, which could be expressed or assumed, might be:

- (90) bié xuǎn - le nà - táng kè, nǐ yòu gēn - bu - shàng  
 don't select-PFV that - CL course you again keep - cannot - up  
 Don't take that course; you won't be able to keep up again.

The same is true for all the other examples of bié imperatives with -le: they are always incomplete, and must be understood in terms of a following clause giving the negative consequences if the warning in the bié clause is not heeded, and this clause is either assumed or actually present. In many cases, the negative consequences are obvious enough that they don't need to be mentioned, as in the earlier example (85):

- (85) bié pèng - le lúzi  
 don't touch - PFV stove  
 Don't touch the stove!

Here, since the natural setting would be one in which the stove is too hot to touch, it would generally be unnecessary to add the information in a following clause that you would be burned otherwise. The implication is still 'or else---', but the hearer can fill in the rest. When it is not so clear why the warning is being given, then the following clause becomes more necessary. For example, if the warning is not to answer the phone, the reasons might not be clear. In such a case, the following clause specifying the consequence is more likely to occur:

- (91) bié jiē - le diànhuà, yòu tīng - bu - dǒng  
 don't answer-PFV telephone again hear-cannot-understand  
 Don't answer the phone; you won't be able to understand what you hear, (just like last time)

So we see that the use of -le in warnings follows very naturally from its use to signal the first event in a sequence. The second event which serves to bound the first one is often understood and therefore not explicitly stated in natural speech context.

### III. The perfective in Mandarin from a typological perspective

Sections I and II have presented an overview of the way the Perfective aspect is manifested in Mandarin. There are three properties of this aspect category in Mandarin which deserve mention. In one of these properties, the Mandarin perfective is similar to other languages with a perfective aspect, but in the other two it is different.

1. 'Bounded' is not 'completed'. In every language with a perfective/imperfective distinction known to us, it seems true that 'perfective' includes but is not co-extensive with 'completed' (see Comrie (1976)). Mandarin is no exception; typically, of course, an event which is bounded is also complete, but it need not necessarily be. Example (2) and (3) which we considered at the beginning of this paper provide excellent illustrations of events which may be bounded (in this case, by the quantifying time phrases), but which are by no means complete:

- (92) tā shuì - le sān - ge zhōngtóu le  
 3sg sleep - PFV three-CL hour CRS  
 S/he has been sleeping for three hours.  
 (93) wǒ zài nàlǐ zhù - le liǎng - ge yuè le  
 I at there live - PFV two - CL month CRS  
 I have lived there for three months now.

2. **Perfectivizing expressions.** One respect in which Mandarin perfective differs from that found in other languages is that in most of these, such as Russian, French, Swahili, Armenian, Hebrew, Georgian, and Ejaghaw (Bantoid), morphology expressing exclusively perfectivity is essentially obligatory for perfective messages. In Mandarin, however, as we have seen, the perfective morpheme -le is not found in the presence of a perfectivizing expression (see examples (75) - (78)). As we have suggested, these perfectivizing expressions seem to serve the same function as -le does, as verbal 'extensions' which signal by their inherent meanings that the event is bounded by naming the result or the spatial, temporal, or conceptual 'end point'.

3. **Quantified complements.** The second peculiarity of Mandarin with regard to perfectivity can be understood in terms of the notion of Transitivity introduced above in I.5. There we pointed out that many languages show a strong correlation between perfectivity and individuated objects; Mandarin is typologically unusual in having generalized this correlation to all quantified verbal complements. Thus, whereas in Russian, a sentence such as "I stood there for an hour" can be expressed either in the imperfective or the perfective, in Mandarin, it must occur with a -le:

- (94) wǒ zài nàr zhàn - le yī - ge zhōngtóu  
 I at there stand-PFV one-CL hour  
 I stood there for an hour.

That is, any mention of amount of time, distance, or specific direct object involved will generally elicit a -le in Mandarin. What is noteworthy about the following sentences is that the amounts mentioned are all very non-specific, yet they generally must occur with -le:

- (95) zhuōzi - shàng duī - le hěn duō tú  
 table - on pile-PFV very much dust  
 A lot of dust has piled up on the table.
- (96) wèi nǐ niàn - shū, nǐ fùqin huā - le duōshǎo qián!  
 for you study-book you father spend-PFV how:much money  
 Your father has spent so much money for you to study!
- (97) tā wèi zhèi - jian shì fèi - le bu - shǎo de xīn  
 3sg for this-CL matter expend-PFV not - little NOM heart  
 S/he put a lot of thought into this matter.
- (98) tā gāo - le yīdiǎn  
 3sg tall - PFV a:little  
 S/he has gotten a little taller.

#### IV. Summary

The semantic/discourse category of perfectivity, signaling that an event is being viewed in its entirety, figures prominently in the grammars of a number of languages. Mandarin is like them in that its grammar has the morphological means for signaling this category, the use of which correlates strongly with a concomitant signal of boundedness (a quantified verbal complement, inherent bounded meaning, or a predicate conveying a subsequent event). Mandarin differs from most other languages in two interesting ways. First, to signal perfectivity, either a perfective verbal suffix, which has no other meaning, or a 'perfectivizing expression' with its own semantic content may be used. Second, while in many aspect languages, the mere presence of a quantified verbal complement need not elicit perfective morphology, in Mandarin, a quantified verbal complement strongly tends to co-occur with perfective morphology.