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The morpho-syntax of aspect in Xiāng Chinese

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Chapter 2. V + *ta*[21]

2.1 Introduction

An event can be presented as a whole, including the beginning and endpoint; it can also be presented with its inner stages. These two ways of presenting events are known as perfective and imperfective respectively. In Mandarin, these two ways are indicated by aspect particles. We have mentioned in chapter 1, that perfective is presented by the particle *le*. Imperfective is presented by preverbal *zài* or postverbal *zhe*. *zài is* a progressive marker indicating that an action in ongoing, and *zhe* is what is often called a durative marker indicating that a result state stays, but it can at other times also indicate that an action is in progress. There are cases in which the differences between *zai* and *zhe* are not so clear-cut, e.g., when both are used to indicate the continuity of an action. We will see later on that Tsai (2008) assigns different structural positions *zài* and *zhe*. In chapter 4, I will return to this particular point, but since the differentiation between them is not my concern in this chapter, I just use the term "imperfective" to refer to both *zài* and *zhe*. The expression of perfective and imperfective in Mandarin can be seen in (1b, 1c) and (1d, 1e) respectively.

(1) a. tā ná zhe/le yī běn shū zài shǒu li.
3SG take IMP/PERF one CL book LOC hand in
with *zhe*: 'He was holding a book in his hand.'
with *le*: 'He took a book in his hand.'

b. tā mǎi le yī běn shū.
3SG bought PERF one CL book
'He bought a book .'

c. tā kàn le yī běn shū.
3SG read PERF one CL book
'He read a book.'

d. tā zài kàn yī běn shū.
3SG IMP read one CL book
'He is reading a book.'

e. tā kàn zhe wǒ bù shuō huà.
3SG look IMP 1SG NEG speak words
'Looking at me, he did not speak.'

zhe and *le* are both aspectual particles, with contrasting meanings. The two particles are acceptable in (1a). When *le* is used, the action is presented as having been completed, if *zhe* is used, the result state is presented as staying on (Li &Thompson 1981); in (1b) - (1c), *le* indicates that the action has been terminated/completed; in (1d), *zài* is used and the action is presented as ongoing. In (1e), *zhe* is used to indicate the continuation of an action, while at the same time another action takes place. Given the use of aspectual particles and their interpretations, we might conclude that different aspects are associated with different particles.

In this chapter, however, we see that in Chángshā, both the perfective and imperfective aspect are expressed by the same marker, *ta*^{21}. This is illustrated in (2) - (4).

(2) a. li^{41} k^{h}an^{45} la^{41} pən^{41} xy^{33} pu^{24}?
2SG read that CL book QM
'Will you read that book?'
b. li^{41} k^{h}an^{45} ta^{21} la^{41} pən^{41} xy^{33} mau^{21}?
2SG read TA that CL book QM
'Have you read (in) that book?'

The minimal pair in (2) shows that *ta*^{21} is a perfective marker: aside from the negative question particle at the end (which differs according to the aspectual properties of the predicate; see Cheng, Huang and Tang 1996). Formally, the only difference between these two sentences is the presence vs. absence of *ta*^{21} which correlates with the difference in meaning: the perfectivity in (2b) which is missing in (2a). There can be little doubt that *ta*^{21} is a perfective marker.

However, when we look at the sentences in (3), there can be equally little doubt that *ta*^{21} is an imperfective (more particularly, a progressive) marker:

(3) a. t^ha^{33} mau^{21} k^han^{45} la^{41} $pən^{41}$ xy^{33}.
3SG NEG read that CL book
'He has not read that book.'

b. t^ha^{33} mau^{21} k^han^{45} ta^{21} la^{41} $pən^{41}$ xy^{33}.
3SG NEG read TA that CL book
'He is not reading that book.'

We will consider the details later on in this chapter, but if we look at the elements in (3b), the progressive reading must come from *ta*^{21}. That *ta*^{21} can express both perfective and progressive is confirmed by (4), which is ambiguous. The only element that can be source of the ambiguity is *ta*^{21}.

(4) t^ha^{33} $zən^{41}zəz^{41}tsən^{33}tsən^{33}$ ti k^han^{45} ta^{21} la^{41} $pən^{41}$ xy^{33}.
3SG attentively read TA that CL book
'He read that book attentively (not necessary finished).'
'He is reading that book attentively.'

Given this observation, we are naturally led to ask:

a) How can these two contrastive meanings be expressed by one single form *ta*^{21}?
b) In which context is *ta*^{21} used as a perfective marker and in which contexts is it used as an imperfective marker?

Note that in the present thesis, since one of my major tasks is to investigate the use of *ta*^{21} as a perfective marker on the one hand, and an imperfective marker on the other hand, in asking the above questions, I neglect temporarily the distinction between progressive and durative. As I have mentioned in the start of this chapter, I just use the term "imperfective" to refer to both (even though at some point I will distinguish between them). The same goes for termination and completion, which will be subsumed under the cover term "perfective".

Different from analyses in the literature (which will be reviewed below), I argue for the idea that there are two *ta*^{21}s sharing the same morphological form. I call them *ta*$^{21}{}_{\text{PERF}}$ and *ta*$^{21}{}_{\text{PROG}}$. I will argue that one of the properties that

distinguishes *ta*^{21}$_{\text{PERF}}$ from *ta*^{21}$_{\text{PROG}}$ is the ability of the former, and not of the latter, to interact with tense in such a way that it can enable tense to "anchor" (in the sense of Tsai 2008; see below) the event expressed by the predicate. The reason why *ta*^{21}$_{\text{PERF}}$ can do this while *ta*^{21}$_{\text{PROG}}$ cannot has to do with their respective positions. In reference to the discussion in chapter 1, I assume that *ta*^{21}$_{\text{PERF}}$, though physically located in the highest inner aspect position ("RealizationP, see chapter 1), entertains a relation with the Outer aspect position, where it is interpreted. On the other hand, *ta*^{21}$_{\text{PROG}}$ is located lower than *ta*^{21}$_{\text{PERF}}$, as a consequence of which it is too low to have a similar relationship with Outer Aspect. For the sentence to be grammatical, it needs other mechanisms to make sure the event argument is licensed; we will discuss this in detail below. Consequently, unlike *ta*^{21}$_{\text{PROG}}$, which always needs to be accompanied by other elements, *ta*^{21}$_{\text{PERF}}$ can stand alone as no other elements are necessary to help tense license the event argument: it can do it itself. My analysis is hence different from previous investigations in two respects: First, perfective aspect is not located in Outer aspect position (as is generally assumed; see below), but in Inner aspect position. And second, the multifunction of *ta*^{21} is not decided upon by the semantics of verbs (as is often done, as we will see), but by the structural property of two different *ta*^{21}.

This chapter is organized as follows. In section 2.2, I present a more detailed description of the distribution and interpretation of *ta*^{21}. I show that *ta*^{21} can be interpreted as a completion/termination or a progressive marker, depending on the context. In section 2.3, I present an overview of the traditional analyses of the multiple functions of *ta*^{21}, which claim that the variation in the interpretation of *ta*^{21} depends on the semantic "dynamicity feature" of the verbs it attaches to, or argue that *ta*^{21} is a "transition" marker. Both approaches share the basic idea that there is only one particle *ta*^{21}. In section 2.4, I evaluate the "dynamicity feature" analysis and point out that the "dynamicity feature" is not the decisive factor that affects the interpretation of *ta*^{21}. I will also show that it is not sensible to treat *ta*^{21} as a "transition" marker. In section 2.5, I point out that it is unsatisfactory to take a single particle approach to *ta*^{21}. We will argue for the existence of two particles *ta*^{21}. In section 2.6, I provide an analysis to interpret the sentence final *tsai*^{21}, arguing that it is a present tense operator. In section 2.7, I provide an analysis to

distinguish $ta^{21}{}_{\text{PERF}}$ from $ta^{21}{}_{\text{PROG}}$. I argued that the two particles are different in syntactic position. $ta^{21}{}_{\text{PROG}}$ is lower than $ta^{21}{}_{\text{PERF}}$. Since in the course of derivation, $ta^{21}{}_{\text{PERF}}$ can link up to TP, through the process of which the event argument is brought out, while this is impossible for $ta^{21}{}_{\text{PROG}}$. As a result, when $ta^{21}{}_{\text{PROG}}$ is used the sentence always needs other elements to strengthen T so that it can license ("bring out") the event variable. These elements include event modification, event coordination, event subordination, negation, sentence final elements relevant to tense etc. In this section I also point out that with the proposed analysis, we can provide an account for the fact that the use of $ta^{21}{}_{\text{PROG}}$ always needs some extra elements to go with it. Section 2.8 is a summary for the chapter.

2.2 *ta*^{21} as a perfective marker and/or a progressive marker

In this section, I show that in eventive predicates ta^{21} is used as a perfective marker without any restrictions; in other cases, ta^{21} is used as a progressive marker but only after certain conditions have been satisfied.

2.2.1 *ta*^{21} as a perfective marker

In this section, I will show that ta^{21} is used as a perfective marker with eventive predicates. It is used to indicate that an event is presented as being terminated or completed. In what follows I first show that as a perfective marker, ta^{21} can stand alone in a sentence. Then I move on to show that ta^{21} can also be used as a progressive marker. However, when ta^{21} is used as progressive marker, the sentence always needs other elements to accompany it. We have seen (1), more examples can be seen in (5) - (8).

(5) a. $\text{tsan}^{33}\text{san}^{33}$ $\text{k}^{\text{h}}\text{u}^{24}$ pu?
cry QM
'Will Tsansan cry?'

b. tsan^{33}san^{33} k^{h}u^{24} ta^{21} .
cry PERF
'Tsansan cried.'

(6) a. *tsan^{33}san^{33} ɕi^{21} i^{33} fu.
wash clothes
b. tsan^{33}san^{33} ɕi^{21} ta^{21} i^{33}fu.
wash PERF clothes
'Tsansan washed his clothes (not necessarily finished).'

(7) a. *tsan^{33}san^{33} k^{h}an^{45} san^{33} pən^{41} xu^{33}.
read three CL book
b. tsan^{33}san^{33} k^{h}an^{45} ta^{21} san^{33} pən^{41} xu^{33}.
read PERF three CL book
'Tsansan read three books.'

(8) a. *pɛi^{33}tsi p^{h}o^{45} .
cup break
b. pɛi^{33}tsi p^{h}o^{45} ka^{41} ta^{21}.
cup break KA TA
'The cup broke.'

In (5) - (8) we see that the (a) sentences, without *ta*^{21} are ungrammatical or, in the case of (5a), have an imperfective reading. After *ta*^{21} is used in (b) sentences, the ungrammatical sentences become grammatical, and they all have a perfective interpretation. *ta*^{21} in these sentences is used as a perfective marker. Note that *ta*^{21} is not allowed to follow a stative predicate. For example, (9b) - (10b) are ungrammatical.

(9) a. t^{h}a^{33} ɕi^{41} xoŋ^{33} ɕou^{45}ɕio^{24}.
3SG love math
'He loves math.'
b. *t^{h}a^{33} ɕi^{41} xoŋ^{33} ta^{21} ɕou^{45}ɕio^{24}.
3SG love TA math

(10) a. t^ha^{33} ɕin[45] Wan[13].
3SG be family-named Wan
'He has family name Wan.'

b. *t^ha^{33} ɕin[45] ta[21] Wan[13].
3SG be family-named TA Wan

Verbs like *ɕi*[41]*xoŋ*[33] 'love', *ɕin*[41] 'be family named', *iou*[41] 'have', and *shou*[24]*u*[13] 'belong to', etc. are incompatible with *ta*[21].

In short, the above shows that, with eventive predicates, *ta*[21] is used as a perfective marker, indicating that an event has been completed/terminated. Normally, *ta*[21] is not acceptable in stative predicates.

In what follows I introduce another case, in which *ta*[21] can only be interpreted as a progressive marker. However, the context in which *ta*[21] functions as a progressive marker depends on a number of conditions. It seems that whenever *ta*[21] is used as a progressive marker, the sentence always needs some other elements. For instance, it is a negative construction, or the sentence is modified by an adverbial phrase.

2.2.2 *ta*[21] as a progressive marker

As is shown above, generally, with non-stative verbs, *ta*[21] is used as a perfective marker, indicating that an action has been completed/terminated. In this section, I will show that in certain contexts *ta*[21] is used to indicate the ongoingness/progression of an action. These contexts are: (i) sentences with a negation; (ii) sentences which are modified by manner, instrumental or locative adverbs, or quantification; and (iii) sentences with a progressive marker.

2.2.2.1 *ta*[21] with negation

There are two negation markers in Chángshā, one is *pu*[24] 'not', which is used to negates subjective intention, expressing prohibition and unwillingness; another is *mau*[21] 'not have', which negates the occurrence of events. If a sentence is

modified by the negation marker *mau*^{21} ‘not (have)’, the action presented with *ta*^{21} can only have a progressive reading. Compare (11a) and (11b).

(11) a. t^{h}a^{33} mau^{21} k^{h}an^{45} tiən^{45}si^{41}.
3SG NEG watch TV
'He did not watch TV.’
b. t^{h}a^{33} mau^{21} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG NEG watch TA TV
'He was not watching TV.'
NOT: ‘He did not watch TV.'

In (11a), the negation marker *mau*^{21} 'not (have)' is used, *ta*^{21} is not used, and the sentence can have a perfective reading. Interestingly, (11b) contains the negation marker *mau*^{21} 'not (have)’ as well as the element *ta*^{21}: in this sentence, the action presented can only have a progressive reading. More examples are given in (12) - (13), where both members of each pair contain *ta*^{21}, however, events in the (a) sentences are presented as having been completed, while events in the (b) sentences are presented as ongoing.

(12) a. t^{h}a^{33} ɕi^{41} ta^{21} i^{33}fu.
3SG wash TA clothes
'He washed his clothes.'
b. t^{h}a^{33} mau^{21} ɕi^{41} ta^{21} i^{33}fu.
3SG NEG wash TA clothes
He was not washing his clothes."

(13) a. tsan^{33}san^{33} shan^{21}wu^{41} kao^{41} ta^{21} uɛi ^{41}shən^{33}.
this morning do TA cleaning
'Tsansan did cleaning this morning.'
b. tsan^{33}san^{33} shan^{21}wu^{41} mau^{21} kao^{41} ta^{21} uɛi^{41}shən^{33}.
this morning NEG do TA cleaning
'Tsansan was not doing the cleaning this morning.'

The sentences in (11) - (13) show that if *ta*^{21} appears with the negation marker *mau*^{21}, the action described is presented as ongoing. *ta*^{21} is the marker of the progressive reading. In what follows I show that in a sentence which is modified by an adverbial, such as a manner adverbial, the use of *ta*^{21} can produce a progressive reading.

2.2.2.2 *ta*^{21} with manner adverbials

Adverbials normally precede the verb in Chángshā. When an activity verb is modified by a certain type of adverb, the sentence is ambiguous. It can be interpreted as either a progressive or as a perfective sentence. These modifiers include *manner, locative* and *instrumental* adverbs, as illustrated in (14) - (15).

(14) a. t^{h}a^{33} ma^{24} ta^{21} tsuo^{24}tsi^{41}.
3SG clean TA desk
'He cleaned the desk.'
NOT: 'He is cleaning the desk.'

b. t^{h}a^{33} fei^{33}k^{h}uai^{45} ti ma^{24} ta^{21} tsuo^{24}tsi^{41}.
3SG quickly clean TA desk
'He cleaned the desk quickly.'
'He is cleaning the desk quickly. '

(15) a. t^{h}a^{33} ɕiɛ^{41} ta^{21} tsi^{21}.
3SG write TA character
'He wrote character(s).'
NOT: 'He is writing characters.'

b. t^{h}a^{33} in^{21} tso^{41}shou^{41} ɕiə^{41} ta^{21} tsi^{21}.
3SG use left hand write TA characters
'He wrote characters with his left hand.'
'He is writing characters with his left hand.'

In (14a), *ta*^{21} is interpreted as a perfective marker only, while in (14b), where the sentence is modified by the manner adverb *fei*^{33}*k*^{h}*uai*^{45}ti 'quickly', *ta*^{21} can be interpreted as a progressive marker indicating that the action is ongoing as

well (next to the use as a perfective marker). The ambiguous interpretation of *ta*^{21} can be observed in (15a) and (15b) as well. The difference is that in the latter the predicate is modified by the instrumental adverb *in*^{21} *tsuo*^{41}*shou*^{41} 'with his left hand'. The fact that the interpretation of *ta*^{21} seems to be influenced by adverbial modifiers is further illustrated in (16) - (18).

(16) a. t^{h}a^{33} uan^{21} ta^{21} la^{41} fu^{41} fa^{21}.
3SG stare TA that CL picture
'He stared at that picture.' (Only interpretation possible)

b. t^{h}a^{33} tai^{33}tai^{33}ti^{21} uan^{21} ta^{21} la^{41} fu^{41} fa^{21}.
3SG attentively stare TA that CL picture
'He is staring at that picture attentively.'
'He stared at that picture attentively.'

(17) a. ta^{33} kən^{33} ta^{21} ŋo^{41}.
3SG follow TA me
'He followed me.' (Only interpretation possible)

b. ta^{33} tɕ^{h}iao^{41}tɕ^{h}iao^{41}ti^{21} kən^{33} ta^{21} ŋo^{41}.
3SG quietly follow TA 1SG
'He followed me quietly.'
'He is following me quietly.'

(18) a. t^{h}a^{33} k^{h}au^{33} ta^{21} mən^{13}.
3SG knock TA door
'He knocked at the door. (Only interpretation possible) '

b. t^{h}a^{33} tɕ^{h}iao^{41}tɕ^{h}iao^{41}ti k^{h}au^{33} ta^{21} mən^{13}.
3SG lightly knock TA door
'He knocked at the door lightly.'
'He is knocking the door lightly.'

ta^{21} in (16a) can only be interpreted as a perfective marker; in (16b), it can be interpreted as a perfective marker and it can also be interpreted as a progressive marker. The same is true in (17). In (17a), *ta*^{21} only has a perfective reading,

while in (17b), where the sentence is modified by manner adverb *tɕ*^{h}*iao*^{41}*tɕ*^{h}*iao*^{41}*ti* 'quietly', *ta*^{21} can refer to the ongoingness or completion/termination of the action. Similarly, in (18b), the adverb *tɕ*^{h}*in tɕ*^{h}*in ti* 'quietly' is used, and the action is interpreted as ongoing or completion/termination, without the adverbial, the action has to be interpreted as being terminated.

The above shows that in certain contexts *ta*^{21} is a progressive marker, which leads to the conclusion that we have two *ta*^{21}s, a perfective marker and a progressive marker. In what follows I show that *ta*^{21} can occur in sentences presented in the progressive marked by preverbal marker *tsai*^{21}*ko*^{24}.

2.2.2.3 *ta*^{21} with the progressive marker *tsai*^{21}*ko*^{24}

In section 2.2.1 we have seen that *ta*^{21} is used as a perfective marker; it indicates that an action has been completed/terminated. In section 2.2.2, we have seen that in some cases, the interpretation of *ta*^{21} is ambiguous: it can be interpreted as a perfective marker, but it can also be interpreted as an imperfective marker indicating the ongoingness of an action. In the present section, I show that *ta*^{21} can be used with predicates modified by preverbal *tsai*^{21}*ko*^{24} which is the marker of the progressive aspect.

In most varieties of the Xiāng dialect, progressive aspect is expressed by the preverbal progressive marker *tsai*^{21}*ko*^{24}*(li*) or *tsai*^{21}*la*^{45}(*li*), originating from the locative phrases *tsai*^{21}*ko*^{24}*li* 'here' and *tsai*^{21}*la*^{45}*li* 'there' respectively. *tsai*^{21}*ko*^{24} has become a grammaticalized progressive marker in Chángshā. *tsai*^{21}*ko*^{24} and preverbal locative phrases are not allowed to co-occur in one sentence, see (19).

(19) a. t^{h}a^{33} tsai^{21}ko^{24} k^{h}an^{41} tiən^{45}si^{41}.
3SG PROG watch TV
'He is watching TV.'

c. *t^{h}a^{33} tsai^{21} tɕia^{33} li tsai^{21}ko^{24} k^{h}an^{41} tiən^{45}si^{41}.
3SG LOC home in PROG watch TV

(19a) illustrates the progressive aspect, expressed by *tsai*^{21}*ko*^{24}. (19b) shows that when the locative phrase *tsai*^{21} *tɕia*^{33}*li* 'at home' is used, the sentence also has a progressive reading. (19c) shows that the locative phrase *tsai*^{21} *tɕia*^{33}*li* 'at home' is not allowed to co-occur with preverbal *tsai*^{21}*ko*^{24}.

What is interesting is that generally, *ta*^{21} can optionally combine with the progressive *tsai*^{21}*ko*^{24} in an activity predicate. The combination produces a progressive reading, and no completion reading is available. This is illustrated in (20).

(20) a. ŋo^{41} k^{h}an^{41} ta^{21} tiən^{45}shi^{41}.
1SG watch TA TV
'I watched TV.'

b. ŋo^{41} tsai^{21} ko^{24} k^{h}an^{41} ta^{21} tiən^{45}shi^{41}.
1SG PROG watch TA TV
'I am/keep watching TV.'

c. ŋo^{41} tsai^{21} ko^{24} k^{h}an^{41} tiən^{45}shi^{41}.
1SG PROG watch TV
'I am watching TV.'

In (20a), *ta*^{21} indicates that the action has been completed/terminated. In this sentence, *ta*^{21} functions as a perfective marker. In (20b), with the preverbal *tsai*^{21}*ko*^{24}, *ta*^{21} can also appear. The sentence produces a reading of ongoingness. Note that *ta*^{21} is not obligatory, but it leads to a slight difference in interpretation. If the *tsai*^{21}*ko*^{24} and *ta*^{21} are used, the sentence emphasizes a continuation of the ongoing action; if only the progressive marker is used, the sentence only indicates that the action is going on. For instance: suppose that Lisi asks Tsansan to play ball with him, and Tsansan does not want to go, he would say (20b) rather than (20c). In uttering this sentence, Tsansan implies that he is already involved in watching TV, which is not going to stop, so he is not going to play ball with Lisi. In contrast, when Lisi asks Tsansan: "What are you doing?" Tsansan would answer the question with (20c) rather than (20b). So with the combination of *ta*^{21} and the progressive marker *tsai*^{21}*ko*^{24}, the sentence focuses more on the continuation of an ongoing action, whereas if

only the progressive marker is used, the sentence just means that an action is ongoing, it is a description of an action in progress.

To show that *ta*^{21} can be used in combination with the progressive marker *tsai*^{21}*ko*^{24}, more examples are given in (21) - (22).

(21) a. ŋo^{41}mən^{13} ta^{41} ta^{21} ma^{13}tɕian^{45}.
1PL play TA mahjong
'We played mahjong.'
NOT: 'We are playing mahjong.'

b. ŋo^{41} mən^{13} tsai^{21}ko^{24} ta^{41} ta^{21} ma^{13}tɕian ^{45}.
1PL PROG play TA mahjong
'We are playing mahjong.'
NOT: 'We played mahjong.'

(22) a. ŋo^{41}mən^{13} tɕ^{h}i^{41} ta^{21} fan^{13}tsi.
1PL build PERF house
'We built a house.'
NOT: 'We are building a house.'

b. ŋo^{41} mən^{13} tsai^{21}ko^{24} tɕ^{h}i^{41} ta^{21} fan^{13}tsi.
1PL PROG build TA house
'We are building a house.'
NOT: 'We built a house.'

ta^{21} in (21a) - (22a) can only be interpreted as a perfective marker, no other reading is available. In (21b) - (22b), the progressive marker *tsai*^{21}*ko*^{24} is used, *ta*^{21} can be used in combination with it, but now the sentence produces a progressive reading (with the same connotation as in (20): the sentence not only emphasizes the ongoingness of the action, but also indicates the continuation of it).

In sum, above, three cases with *ta*^{21} are introduced. We have seen that in negative sentences with *ta*^{21}, the sentences are interpreted as negating an ongoing action; in sentences with both *ta*^{21} and manner (or instrumental adverbials), the events described can have either a completion or a progressive

reading; in sentences with both *ta*^{21} and the preverbal progressive marker, the events described can only have a progressive reading.

In what follows I show another context, in which the interpretation of the sentences varies depending on whether *ta*^{21} is used.

2.2.2.4 *ta*^{21} with sentence final *tsai*^{21}*ko*^{24}

The above shows that *ta*^{21} can be combined with the preverbal *tsai*^{21}*ko*^{24} in a sentence with a progressive reading. In this section, I show that in Chángshā *tsai*^{21}*ko*^{24} can also appear in sentence final position (in section 2.6, I will provide an analysis to clarify its main function). What is relevant to this observation is that in a sentence describing an activity, *ta*^{21} is obligatory. This is illustrated in (23).

(23) a. ŋo^{41}mən^{13} ta^{41} ta^{21} ma^{13}tɕian^{45} tsai^{21}ko^{24}.
1PL play TA mahjong TSAIKO
'We are playing mahjong.'
NOT: 'We played mahjong.'

b. *ŋo^{41}mən^{13} ta^{41} ma^{13}tɕian^{45} tsai^{21}ko^{24}.
1PL play mahjong TSAIKO

c. ŋo^{41}mən^{13} ta^{41} ta^{21} ma^{13}tɕian ^{45}.
1PL play TA mahjong
'We played mahjong.'
NOT: 'We are playing mahjong.'

d. tɕi^{54}ts^{h}ə^{33} fan^{33} ta^{21} tsai^{21}ko^{24}.
car turn over TA TSAIKO
'The car turned over.'

In (23a), sentence final *tsai*^{21}*ko*^{24} is used. In this case, as we see in (23b), *ta*^{21} is obligatory, as opposed to the sentences in which preverbal *tsai*^{21}*ko*^{24} is used, in which case, *ta*^{21} is optional. Note that to produce a progressive reading in a sentence with *ta*^{21}, sentence final *tsai*^{21}*ko*^{24} must be present. Otherwise, the sentence only has a perfective reading, as is shown in (23c) (the explanation of this interaction between sentence final *tsai*^{21}*ko*^{24} is provided in Section 2.7.1).

In (23d), we have a different situation: the verb is an achievement, we have a perfective interpretation and *tsai*^{21}*ko*^{24} is optional in this sentence (I will come back to it in section 2.6.3).

Note that I have mentioned in the beginning that in Mandarin with *holding* verbs, both the perfective marker *le* and durative marker *zhe* are acceptable. However in Chángshā, all we have is multi-functional *ta*^{21}. Before I close off this introduction of the distribution and interpretation of *ta*^{21} in different contexts, I will present a few examples to show the use of *ta*^{21} with holding verbs.

2.2.3 *ta*^{21}, a perfective or a durative marker: *ta*^{21} with *holding* verbs

With holding verbs, *ta*^{21} can be interpreted as a perfective marker; it can also be interpreted as an imperfective marker.

(24) tsan^{33}san^{33} tia^{24} ta^{21} i^{13} tsa^{24} lan^{24}tsi .
take TA one CL basket
a. 'Tsansan was holding a basket.'
b. 'Tsansan took a basket.'

(25) tsan^{33}san^{33} tɕ^{h}uan^{33} ta^{24} i^{24} tɕian^{24} xin^{33} ts^{h}ən^{45}i^{33}.
wear TA one CL new shirt
a. 'Tsansan is wearing a new shirt.'
b. 'Tsansan put on a new shirt.'

In sentences (24) - (25), *ta*^{21} can have two interpretations: on the one hand, it can indicate that the actions have been completed, on the other, it can also be interpreted as a durative marker, indicating the continuation of the state produced by the action after it has been completed. In the latter case, for example, in (24), if *ta*^{21} is interpreted as a durative marker, the sentence means Tsansan was holding a basket.

That *ta*^{21} can have these two interpretations can be shown in sentences involving adverbial modification.

(26) a. tsan^{33}san^{33} tsuo^{13}t^{h}iən^{33} tia^{24} ta^{21} i^{13} tsa^{24} lan^{24}tsi .
yesterday take TA one CL basket
'Tsansan was holding a basket yesterday'.
'Tsansan took a basket yesterday.'

b. tsan^{33}san^{33} i^{24}tsi^{24} tia^{24} ta^{21} i^{13} tsa^{24} lan^{24}tsi .
continuously hold TA one CL basket
'Tsansan was holding a basket continuously.'

The sentence in (26a) is modified by the temporal adverb *tsuo*^{13}*t*^{h}*iən*^{33} 'yesterday', and *ta*^{21} can have two interpretations. By contrast, in (26b), the sentence is modified by the adverb *i*^{24}*tsi*^{24} 'continuously', and *ta*^{21} can only be interpreted as a durative marker.

More examples can be seen with *placement* verbs such as *fan*^{45} 'put', *kua*^{45} 'hang', or *posture* verbs, like *tso*^{21} 'sit', *tsan*^{45} 'stand', and *tan*^{45} 'lie' etc.

(27) tso^{24}tsi shan^{21} fan^{45} ta^{21} i^{24} pən^{41} xy^{33}.
desk on place TA one CL book
'A book was lying on the desk.'

(28) mən^{13}kou^{41} tsan^{41} ta^{21} xə^{24}to^{33} zən^{13}.
door stand TA many people
'Many people were standing at the door.'
'Many people got/came to stand at the door.'

As indicated, *ta*^{21} in (27) - (28) can be understood either as indicating the completion of the action or the duration of the state produced by the action. Take (28): if *ta*^{21} is understood as a completive marker, the sentence means that a lot of people came to stand at the door; the sentence focuses on the completion of the action, and the speaker is not concerned with the result state. In a result state reading, on the other hand, the focus of the sentence is on the duration of the result state produced by the action, and the completion of the process is irrelevant.

To distinguish the two interpretations more clearly, we can use adverbs like *xə*^{41} *k*^{h}*uai*^{45} 'very quickly' and quantification adverbs like *tsən*^{41}*si*^{24} 'always', this is done in (29a)- (29b).

(29) a. mən^{13}kou^{41} xə^{41} k^{h}uai^{54} tsan^{41} ta^{21} xə^{41} to^{33} zən^{13}.
door very quickly stand TA many people
'Many people came to stand at the door quickly.'

b. mən^{13}kou^{41} tsən^{41}si^{21} tsan^{41} ta^{21} xə^{41} to^{33} zən^{13}.
door always stand TA many people
'Many people are always standing at the door.'

The adverb *xə*^{41}*k*^{h}*uai*^{45} 'very quickly' is used in (29a), and *ta*^{21} can only have a completion reading; the reading of duration is not available. In (29b), the adverb *tsən*^{41}*si*^{24} 'always' is used, and *ta*^{21} can only express the continuation of the result state; the completion reading is not available.

The above shows that with some verbs, *ta*^{21} can be interpreted as a durative marker as well as completion marker, or at least so it seems; we will briefly return to the *holding* verbs in 2.5 below. Comparatively, in Mandarin, in the same case, these two interpretations depend on whether *le* or *zhe* is used. I am going to provide an analysis for this multifunctionality of *ta*^{21} and its relation with *zhe* in Chapter 4.

2.2.4 Summary

To sum up, in this section I have shown three types of contexts in which *ta*^{21} is used with different interpretations. I have shown that with non-stative predicates, *ta*^{21} is used to present an event as having been completed/terminated; whether *ta*^{21} can get a completion or termination reading depends among other things on the properties of the event. Generally, *ta*^{21} is not allowed with stative predicates. We have also seen that in similarly eventive sentences, *ta*^{21} can also be interpreted as a progressive marker. For *ta*^{21} to be interpreted as a progressive marker, though, we saw that it must always be accompanied by another element in the sentence. For convenience, the distribution and interpretation of *ta*^{21} is presented in table 1 (excluding

sentences with holding verbs, which form a special case as we just saw, and as we briefly see again in 2.5 below).

Table 1. Reading of *ta*^{21}

	perfective	imperfective
with bare eventive predicate	√ e.g. (2b), (5)-(8)	*
with negation	*	√ e.g. (11b), (12b),(13b)
with manner adverbs	√ e.g. (15) -(18b)	√ e.g. (15) -（18)
with preverbal *tsai*^{21} *ko*^{24}	*	√ e.g. (20b), (21b)
with sentence final *tsai*^{21} *ko*^{24}	*	√ e.g. (23c), (23d)

These observations are interesting: How can one marker express two notions (perfective and progressive) that seem so different? How can we keep the contrasting meanings of *ta*^{21} apart? Is there just one *ta*^{21}, which is, say, a perfective marker with the possibility of deriving the progressive reading from it (or the other way around)? Or are there two distinctive *ta*^{21}s which happen to have the same form? Before I provide an answer to these questions, let me first introduce the analyses available in the literature.

2.3 Literature introduction

2.3.1 *ta*^{21} as a completive or a progressive/durative marker–a case of overlap

In the earlier literature, it is widely accepted that *ta*^{21} is multifunctional. It can be used to indicate that an action is terminated/completed, in progress or that it indicates the continuation of the state presented in the event (Lǐ 1991; Wǔ 1999;

Lú 2007). Lǐ (1991) claims that "*ta*^{21} has two functions: one is that it is used as a modal particle, and the other is that it is used as an aspect marker, when *ta*^{21} is used as an aspect marker, it is equivalent to *zhe*, *le* in Mandarin …" (interpreted from Lǐ 1991:540). In Zhōu (1998), *ta*^{21} is treated as a past tense marker, equivalent to *le* in Mandarin (Zhōu 1998:9). Wu (1999) claims that "the usage of *ta*^{21} as an aspectual marker is more or less the same as that of the standard Chinese *le* and *zhe*, where *le* is used as a Perf(ective) aspect marker, and *zhe* is used as a Con(tinuous) marker" (Wǔ 1999:59). Lú (2007) suggests that *ta*^{21} is like *le*, *guo* (for experiential aspect), and *zhe* in Mandarin (Lú 2007:230).

Regarding the multiple aspectual functions of *ta*^{21}, it is widely believed that the interpretation of *ta*^{21} varies depending on the semantic "dynamicity feature" of the verbs it co-occurs with (Cuī 1997; Lú 2007). Cuī (1997) points out that if the verb *ta*^{21} attaches to is dynamic, *ta*^{21} is a perfective marker, while if the verb it attaches to is stative, *ta*^{21} is interpreted as a durative marker. For example, since in (30a) the verb *tɕ^{h}ia*^{24} 'eat' is dynamic, *ta*^{21} indicates that the action is completed; while in (30b), the verb *xui*^{45} 'sleep' is static, and *ta*^{21} expresses that the state of lying down continued.

(30) a. t^{h}a^{33} tɕ^{h}ia^{24} ta^{21} i^{13} tsa^{13} pin^{13}ko^{41}.
3SG eat TA one CL apple
'He ate one apple.'

b. t^{h}a^{33} tsai^{21} tsuan^{13} shan^{21} xui^{41} ta^{21}.
3SG LOC bed on sleep SFP
'He was sleeping on the bed.'

Lú (2007) makes the same claim as Cuī (1997). She suggests that *ta*^{21} has a cross-categorical function when used as an aspect marker. In order to resolve the ambiguity, we need to rely on the semantics of the verb and the context (Lú 2007). Following Cuī (1997), Lú assumes that as a perfective marker, *ta*^{21} follows a dynamic or instantaneous verb, e.g. *ɕi*^{41} 'wash', *ts^{h}an*^{45} 'sing', *tsou*^{41} 'walk', *xue*^{24} 'say', *k^{h}u*^{24} 'cry', *tiao*^{45} 'jump'. When appearing with a stative verb, *ta*^{21} indicates the duration of a state. In her analysis, verbs of *posture*, *wearing* and *placement* such as *tso*^{21} 'sit', *tsan*^{45} 'stand', *kua*^{45} 'hang', *k^{h}ao*^{45} 'lean', etc. are

classified as stative verbs (Lú 2007:233). Lú attributes the ambiguous interpretation of *ta*^{21} to the context. She claims: "There are cases in which we need to make use of the contexts to distinguish the interpretation of *ta*^{21}" (Lú 2007:233). (31) is from Lú (2007:233).

(31) a. tsan^{33}san^{33} la^{24} ta^{21} i^{33} tsa^{24} xu^{33}pao^{33} k^{h}ə^{45} ka^{41} ta^{21}.
take TA one CL schoolbag leave KA PERF
'Tsansan took a schoolbag and left.'

b. tsan^{33}san^{33} la^{24} ta^{21} i^{33} tsa^{24} xu^{33} pao^{33} tsai^{21} shou^{41}li.
take TA one CL school- bag LOC hand in
'Tsansan is holding a schoolbag in his hand.'

According to Lú (2007), sentence (31a) contains two actions. Following the verb expressing the first action, *ta*^{21} is a perfective marker. In (31b), the sentence describes a stative situation, possibly enforced by the locative phrase *tsai*^{21} *shou*^{41}*li* 'in his hand', with *ta*^{21} indicating the duration of a state.

2.3.2 *ta*^{21} as a "transition" marker

In contrast to the above analyses, I have suggested elsewhere that the multiple functions of *ta*^{21} can be unified (Lǔ 2010). I proposed that *ta*^{21} is a perfective marker, indicating the transition of an action/state from [-φ] to [φ] (Lǔ 2010:234). For example, sentence (30a) can be interpreted as meaning that Tsansan has gone from the state of not eating the apple to the state of having eaten the apple. Similarly, sentence (24) is interpreted as meaning that Tsansan has moved from the state of not holding a book to the state of holding a book. See (32) - (33).

(32) tsan^{33}san^{33} tɕ^{h}ia^{24} ta^{21} la^{45} tsa^{24} pin^{13}ko^{41}.
eat TA that CL apple
'Tsansan ate that apple, (not necessary finished that apple).'

(33) tsan^{33}san^{33} tia^{24} ta^{21} i^{13} tsa^{24} lan^{24}tsi .
take TA one CL basket
a. 'Tsansan is holding a basket.'
b. 'Tsansan took a basket.'

Under the transition approach, there is no need to wonder whether *ta*^{21} expresses an action as being terminated/completed, or whether it expresses the ongoing existence of the result state as is shown in (32) and (33). In both cases, *ta*^{21} is to indicate the transition from one state to another. For example in (33), *ta*^{21} indicates that Tsansan has changed from a state of not holding a basket to a state of holding a basket.

2.3.3 Summary

In section 2.3 I introduced two approaches from the literature to the use of *ta*^{21} as a perfective or imperfective marker. One of them argues that the verb feature "dynamicity" can be used to disambiguate the interpretation of *ta*^{21}. That is, if the verb which *ta*^{21} attaches to is dynamic, *ta*^{21} indicates that the action presented has been completed/terminated, while if the verb which it attaches to is stative, *ta*^{21} indicates the duration of the result state or the ongoingness of the action. Another approach proposes to reinterpret *ta*^{21} as indicating the transition of the action/state denoted by the verb from one state to another.

In what follows I evaluate these analyses in some detail and point out that the verb feature "dynamicity" is not a decisive factor in disambiguating the interpretation of *ta*^{21}. I also point out that the "transition" analysis in which *ta*^{21} is used to indicate that an event has changed from one state to another is not in itself sufficient to cover the variation in the interpretation of *ta*^{21}.

2.4 Critics of earlier accounts

2.4.1 "Dynamicity" is not relevant to *ta*^{21}

In this section, I provide a review of the traditional analysis of the variation in the interpretation of *ta*^{21}. I point out that there are four sets of data that can help

argue against the idea that the interpretation of *ta*^{21} is dependent on the verb feature 'dynamicity'.

First, I would like to point out that *ta*^{21} does not necessarily indicate that an action has been terminated/completed even if the verb it attaches to is dynamic. For example, as we have seen, in sentences modified by a manner adverb, *ta*^{21} cannot only indicate the completion of the action but also its ongoingness ((34) - (35)).

(34) a. t^ha^{33} k^han^{45} ta^{21} la^{45} $pən^{45}$ xu^{33}.
3SG read TA that CL book
'He read that book.'

b. t^ha^{33} $zən^{21}zən^{21}tsən^{33}tsən^{33}ti$ k^han^{45} ta^{21} la^{45} $pən^{45}$ xu^{33}.
3SG attentively read TA that CL book
'He is reading that book attentively.'
'He read that book attentively.'

(35) a. t^ha^{33} uan^{21} ta^{21} la^{41} $pən^{41}$ xu^{33} .
3SG look TA that CL book
'He took a look at the book.'

b. t^ha^{33} $tai^{33}tai^{33}ti^{21}$ uan^{21} ta^{21} la^{41} $pən^{41}$ xu^{33}.
3SG attentively look TA that CL book
'He is looking at that book attentively.'
'He took a look at that book attentively.'

The verbs in (34) - (35) are all activities. Contrary to what is suggested by the traditional analysis, *ta*^{21} in (34b) - (35b) either indicates the completion or the ongoingness of the action. (34) - (35) show that the apparently ambiguous interpretation of *ta*^{21} cannot be attributed to the semantic feature "dynamicity" of verbs, since the verbs in (34) - (35) are all dynamic, and when they are followed by *ta*^{21}, the sentences cannot only produce a completion reading, but also a progressive reading.

That the interpretation of *ta*^{21} is not dependent on "dynamicity" is also confirmed by the observation that in activities modified by sentence final

tsai^{21}*ko*^{24}, *ta*^{21} can only be interpreted as a progressive marker. We have seen such sentences above. More examples can be seen in (36).

(36) a. t^{h}a^{33} ɕi^{41} ta^{21} i^{33}fu tsai^{21}ko^{24}.
3SG wash TA clothes TSAIKO
'He is washing clothes.'

b. t^{h}a^{33} kai^{45} ta^{21} fan^{13}tsi tsai^{21}ko^{24}.
3SG build TA house TSAIKO
'He is building (a) house(s).'

The verbs *ɕi*^{41} 'wash' and *kai*^{45} 'build' are dynamic verbs, yet *ta*^{21} is not interpreted as a perfective marker. This shows that we cannot relate the interpretation of *ta*^{21} to the properties of the predicates *ta*^{21} attaches to. Note that for (36), one may argue that possibly the progressive reading comes from sentence final *tsai*^{21}*ko*^{24}, but in section 2.6.2, we will argue that this is not the case.

The third set of data which show that the interpretation of *ta*^{21} does not vary in accordance with the dynamic properties of verbs comes from the use of *ta*^{21} in *posture*, *wearing* and *placement* verbs. In the traditional analysis, these verbs are treated as stative predicates (Luó 2006:22). However, we know that the properties of these verbs are debatable: at least some *posture* verbs can be seen as being dynamic if the subject is agentive. What is relevant is that following these verbs, *ta*^{21} is actually better treated as a perfective marker in a-sentences in (37) - (38) (37 is adapted from (29)).

(37) a. mən^{13} kou^{41} i^{13} xia^{21} tsi tsan^{41} ta^{21} xə^{41} to^{33} zən^{13}.
door suddenly stand TA many people
'Many people came to stand at the door all of a sudden.'

b. mən^{13} kou^{41} xə^{41} to^{33} zən^{13} tsan^{41} ta^{21}.
door many people stand TA
'There are many people standing at the door.'

(38) a. tsuo^{24} tsi shan^{21} i^{41}tɕin^{33} fan^{41} ta^{21} i^{24} pən^{41} xu^{33}.
desk on already place TA one CL book
'A book has already been placed on the desk.'
b. i^{24} pən^{41} xu^{33} tsai^{21} tsuo^{24}tsi shan^{21} fan^{41} ta^{21}.
one CL book LOC desk on place TA
'A book is lying on the desk.'

In Lǐ (1991), Zhōu (1998), Wú (1999) and X.Q.Lú (2007), the verbs in these sentences are seen as stative verbs, and *ta*^{21} is argued to be a durative marker. However, while the a-examples already show that this cannot be the whole story, we could even argue that with verbs like these, the non-perfective reading of *ta*^{21} is actually derived from the perfective *ta*^{21}. We have reached a certain state by the completion of an event (e.g., getting up or putting down) and the supposed durative reading is the continuing existence of the result state.

Fourthly, if it is true that *ta*^{21} indicates the continuation of a state with stative verbs, we would expect that *ta*^{21} can be used in states described by general stative verbs. This is, however not the case. *ta*^{21} cannot be used to indicate the duration of a state expressed by a stative verb. This is illustrated in (39).

(39) a. *ta^{33} tsai^{21} Shan^{41}xai^{41} tɕu^{21} ta^{21}.
3SG LOC Shanghai live TA
b. ta^{33} tsai^{21} Shan^{41}xai^{41} tɕu^{21} .
3SG LOC Shanghai live
'He lives in Shanghai.'

The verb *tɕu*^{21} 'live' in (39) is a stative verb, and *ta*^{21} cannot be used. If *ta*^{21} is able to indicate the continuation of a state in a stative predicate, (39a) should be acceptable. However, this is not the case: (39a) is ungrammatical.

Finally, the traditional analysis fails to account for the fact that *ta*^{21} is compatible with the progressive aspect which is indicated by preverbal *tsai*^{21}*ko*^{24}. Progressive aspect selects non-stative predicates, so the compatibility of *ta*^{21} with the progressive makes it impossible to maintain the idea that *ta*^{21} expresses the perfective meaning in dynamic predicates. Since

progressive and perfective are semantically contrasting, it is hard to justify the combination of the two if we maintain that *ta*^{21} is perfective, and can only be perfective with dynamic verbs.

To sum up, the above arguments show that it is not sensible to attribute the multiple functions of *ta*^{21} to the verb feature "dynamicity". With one and the same "dynamicity" verb, *ta*^{21} can be interpreted as perfective or progressive, or in any case, it is compatible with a non-perfective reading, like in sentences with certain adverbs or with sentence final *tsai*^{21}*ko*^{24}.

2.4.2 *ta*^{21} is not a "transition" marker

To deal with the observation that *ta*^{21} is used to express the perfective or imperfective aspect, I tried before to unify the multiple uses of *ta*^{21} by proposing that *ta*^{21} is basically a perfective marker (Lǔ 2010). I argued that the main function of *ta*^{21} is to indicate that the denoted event or state has completed a transition from one state to another. By arguing that *ta*^{21} is a transition marker, I avoid the ambiguous status of *ta*^{21}. However, this approach is far from satisfactory. This is because there are data that the "transition" approach fails to account for. For example, in an activity modified by the negative marker, *ta*^{21} can only indicate the duration of the action. See (40).

(40) a. t^{h}a^{33} k^{h}an^{45} ta^{21} tian^{45}si^{41}.
3SG watch TA TV
'He watched TV.'

b. t^{h}a^{33} mau^{21} k^{h}an^{45} ta^{21} tian^{45}si^{41}.
3SG NEG watch TA TV
'He is not watching TV.'
NOT: 'He did not watch TV.'

If *ta*^{21} is a transition marker, it is not clear why *ta*^{21} is used as a perfective marker in (40a), whereas it is used as a progressive marker in (40b). Furthermore, the transition approach cannot provide an account for the combination of *ta*^{21} with the progressive marker, preverbal *tsai*^{21}*ko*^{24}. The reason is as mentioned above, that it is hard to justify the combination of two

particles with contrasting meanings. Given these considerations, I conclude that the transition approach leaves too many questions open.

2.4.3 Intermezzo: *ta*^{21} as a marker of "posttime"

Under the single *ta*^{21} hypothesis, we may entertain another possibility (which seems reasonable but which eventually will be discarded). We may argue that *ta*^{21} is a "marked" perfective marker. With the expression "marked" perfective marker, we mean a marker that indicates not only the completion of the action but also the continuation of the result state caused by the action. This definition of perfective marker is different from what Comrie (1976) has defined, which we call unmarked perfective. That is, we take the unmarked perfective as "indicating the view of a situation as a single whole without distinction of the various phases that make up that situation" (Comrie 1976:16). Similarly, Smith (1991) claims that the perfective represents a situation as a single whole, and the span of the perfective includes the initial and final-endpoint of the situation (Smith 1991:103). As a "marked" perfective marker, *ta*^{21} does not only indicate termination/completion of an event but also the period after the completion. This seems plausible since we have seen that normally, in non-stative predicates, *ta*^{21} is used to express the perfective meaning. Only under specific circumstances can *ta*^{21} be interpreted as indicating the continuation/ongoingness of an action. This approach can provide a direct account for *posture*, *wearing*, *holding* and *placement* verbs as these verbs share the property of typically producing a result state after the actions are completed. With all these verbs, *ta*^{21} can have two interpretations: it can be interpreted as indicating the completion of an action and it also can be interpreted as indicating the continuation of the result state. With the proposed analysis, we can argue that the continuation of the state is part of the function of *ta*^{21}: it indicates not only the endpoint of the action but also the time span after the completion of the action.

The observation that verbs produce result states after the action has been completed is not restricted to Chángshā. In dealing with the perfective in Dëne Sųlinė Chipewyan, an Athabaskan language of Northern Canada, Wilhelm (2007) points out that the common analysis of the perfective, in which a

situation is presented as a whole, does not work for the perfective in Dëne. This is because according to her, in Dëne, activities entail not only termination but also event completion when they appear in the perfective (Wilhelm 2007:49). Wilhelm points out that "in Dëne, activities have the same completion interpretation as accomplishments. She says that "it would certainly be undesirable to assume that a viewpoint aspect contributes situation aspectual meaning" (Wilhelm 2007:51). Following Klein (1994) and Parsons (1990), Wilhelm (2007) proposes that the Dëne perfective focuses not only on the entire situation time, but also on the "posttime" of the situation. She does not define what "posttime" is in detail, but provide (42), from where we understand it as the time after the change of the state. (41) is used to show the denotation of unmarked perfective. (41) - (42) are from Wilhelm (2007:49).

(41) Unmarked Perfective

……[TT-{TSit……}-]……>

(42) Dëne Completive Perfective

……[TT-{TSit……}-]++++++>

posttime

According to Wilhelm (2007), at a "posttime" of TSit (Situation time), the situation has already come to an end. Since perfective includes a "posttime", every TT (Topic time) contains a change of state, namely from ϕ (as denoted by the lexical verb, and true in TSit), to ¬ϕ (true through the "posttime", and part of the denotation of the perfective verb) (Wilhelm 2007:52-53). Her evidence comes from the morphology and semantics of positional statives (*sit*, *lie*, etc.). She observes that these verbs inflect for imperfective and perfective: *the* is for imperfective and *ghe* is for perfective. The stem may also change. She points out that these positional statives with imperfective meaning are morpologically perfective and demote the result state of completed action or event (Wilhelm 2007:52). Wilhelm (2007) illustrates her proposal with (43) - (44). (43a) is the stative use of the verb in the imperfective and (43b) is the non-stative use of the verb in the perfective (from Wilhelm 2007:52-53).

(43) nonstative

a. Nesd á
Ne-Ø-1s-cl-stem:sg sit
'I am sitting down (in the process)' IMPF

b. Nida
ne-(the-)i - Ø- da
th-CM-1s- cl- stem:sg sit
'I sat down.' PERF

(44) stative

a. thida
the-i- Ø-da
CM-1s-cl-stem:sg sit
'I am sitting (I sat down and am now sitting)' IMPF

b. Ghid á
ghe-i - Ø- d á
CM-1s-cl-stem:sg sit
'I sat/was sitting (now I don't anymore)' PERF

According to Wilhelm, the imperfective stative form in (44a) has the same stem and the same Conjugation Marker (CM) (although invisible here) as the perfective non-stative form in (43b); thus it is morphologically a perfective (Wilhelm 2007: 53). In (44a) the meaning of the imperfective stative phrase, whose paraphrase is: *I sat down and am now sitting* indicates that the verb denotes the result, or "posttime", of a sitting down event, it is like the meaning in (43b).

Having introduced the "posttime" approach, in which the perfective marker does not only indicate the completion of the action, but also the result state, let us return to our observations and see whether we can make use of this "posttime" approach. At first sight, this analysis would seem to allow us to account for the use of *ta*[21] in result states and *holding*, *posture*, and *wearing* verbs. For example, we can argue that verbs like *tso*[21] 'sit', *tsan*[45] 'stand', *la*[13] 'hold', and *pei*[33] 'carry' share the property that they produce a result state after

the actions have been completed. Therefore, the stative reading of *ta*^{21} can be seen as part of the denotation of the perfective.

From the examples in (43) - (44), we can see that the case of Dëne seems like that of Cháng shā, in that the perfective realized on certain verbs indicates not only the completion of the action, but also the continuation of the result state. Superficially, it seems that we can treat *ta*^{21} as a marked perfective indicating the "posttime" as is proposed in Wilhelm (2007). However, I have at least four arguments against this "posttime" approach. First, if we assume the "posttime" analysis, we would expect the "posttime" reading of *ta*^{21} to appear not only in verbs such as *tso*^{21} 'sit' and *tsan*^{45} 'stand', but also with other predicates. This is not, however, the case. We saw that in Cháng shā, *ta*^{21} normally produces a termination reading with activity verbs, and a completion reading with accomplishment verbs. We have seen some examples above. Some of them are again presented in (45).

(45) a. t^{h}a^{33} uan^{13} ta^{21} tian^{45} iou^{13}.
3SG play TA electric game
'He played electric game.'

b. t^{h}a^{33} k^{h}an^{45} ta^{21} i^{24} pu^{21} tian^{45} in^{41}.
3SG swim$_{V}$ TA one CL film
'He saw a movie.'

ta^{21} in (45a) can only be interpreted as a termination marker. No completion reading is available, let alone a "posttime" reading. In (45b), it means completion, as indicated.

A second argument relates to the observation that *ta*^{21} is compatible with action verbs in the progressive, where it does not produce a result state. This can be seen in (46).

(46) a. t^{h}a^{33} i^{24}tsi^{24} uan^{13} ta^{21} iou^{13}xi^{41}.
3SG continuously play TA game
'He is playing games continuously.'

b. ŋo^{41}mən^{13} ta^{41} ta^{21} ma^{13}tɕian^{45} tsai^{21}ko^{24}.
1PL play TA mahjong TSAIKO
'We are playing mahjong.'

In (46a) - (46b), *ta*^{21} can only be interpreted as a progressive marker. This makes it difficult to relate the interpretation of *ta*^{21} to the completion of an action; it is even less possible to indicate "posttime": the result state of the completion of the action.

Thirdly, we have seen that in activities, *ta*^{21} can always be used if the sentence appears in the progressive.

(47) ŋo^{41}mən^{13} tsai^{21}ko^{24} ta^{41} ta^{21} ma^{13}tɕian^{45}.
1PL PROG play TA mahjong
'We are playing mahjong.'
Not: 'We played mahjong.'

In (47), *ta*^{21} is combined with the progressive marker, preverbal *tsai*^{21}*ko*^{24}. Perfective and progressive are two aspects with contrasting meanings. If it was a perfective marker of the sort in (44a), the combination of the progressive marker *tsai*^{21}*ko*^{24} with *ta*^{21} should not be allowed. The combination in (47) shows that *ta*^{21} cannot be a perfective marker in the sentence.

2.4.4 Summary

Above, I first pointed out that relating the ambiguity of *ta*^{21} to the verb feature "dynamicity" is not satisfactory, since sentences with *ta*^{21} and a non-stative predicate are ambiguous between a perfective and progressive reading. Apparently, the "dynamicity" feature is not the decisive factor for distinguishing between the various interpretations of *ta*^{21}. I then pointed out that it is not sensible to treat *ta*^{21} as a "transition" marker, nor a marked perfective marker indicating not only the endpoint but also the time after the completion of the action. In what follows, I provide a new analysis to account for the use of *ta*^{21}. I start out from arguing for the existence of two particles: *ta*$^{21}_{\text{PERF}}$ and *ta*$^{21}_{\text{PROG}}$, then I provide an analysis to distinguish the two.

2.5 ta^{21}_{PERF} and ta^{21}_{PROG}

In this section, I will show that ta^{21} should not be treated exclusively as a perfective particle; instead, I argue that there are two ta^{21}s in Chángshā: a perfective marker and a progressive marker. Before I present my analysis, I first point out that ta^{21} is not used as a durative marker. The imperfective reading of ta^{21} in *placement*, *holding*, *posture* and *wearing* verbs is derived from the use of ta^{21} as a perfective marker.

I have two reasons to argue for this view. First, I observe that the meaning of the sentences is very closely related to the perfective: it is the continuing existence of the result state; it is somewhat like the "posttime" as mentioned above. Some relevant examples are repeated here.

(48) a. $tso^{24}tsi$ $shan^{21}$ fan^{41} ta^{21} i^{24} $pən^{41}$ xy^{33}.
desk on put TA one CL book
'A book was put on the desk.'

b. $tsan^{33}san^{33}$ tia^{13} ta^{21} i^{24} ko^{41} $lan^{24}tsi$.
lift TA one CL basket
'Tsansan lifted a basket.'

In the earlier literature, the ta^{21} in (48) is interpreted as an imperfective marker indicating the result state of the actions. However, ta^{21} in these sentences is better treated as a perfective marker, and the result state reading is derived from the perfective: the action is completed, and the result state continues. This reading only happens with certain verbs like *placement*, *holding*, *posture*, *wearing* etc. These verbs are different from *do*, *wash*, *watch* etc. These latter verbs are simple activities, while verbs like *lift* and *put on* are more like accomplishment verbs in the sense that they have a natural endpoint: once you have put something on, you are wearing it, once you have lifted something, you are carrying it, once you have taken something, you are holding it. So in (48), the result state meaning does not come from the perfective alone: it is the result of a combination of the perfective and this particular type of verb: after the completion of the action, the result state stays. This result state reading does not happen with activity verbs like *do*, *watch*, *wash*, etc. Secondly, as we have

seen in the very beginning of the chapter, in the cases (specifically, *holding*, *wearing* verbs etc.) where *ta*^{21} is interpreted as an imperfective marker, *le* in Mandarin can also be used this way. There is no difference in the interpretation of the sentences.

(49) a. zhuōzi shàng fàng zhe/le yī běn shū. (*Mandarin*)
desk on put IMP/PERF one CL book
'A book was lying put on the desk.'
b. tsānsān tí zhe/le yī gè lánzi.
lift IMP/PERF one CL basket
'Tsansan was carrying a basket.'

So from now on, I leave *ta*^{21} indicating continuation of the result states out of the discussion. I will only be concerned with distinguishing the perfective *ta*^{21} (*ta*$^{21}{}_{\text{PERF}}$), indicating the completion/termination of actions, from the imperfective *ta*^{21} (*ta*$^{21}{}_{\text{PROG}}$), indicating the ongoingness of actions.

The main arguments for the postulation of two *ta*^{21}s are based on three observations: the use of *ta*^{21} with predicates modified by certain adverbs; the use of *ta*^{21} with negation; and its use in sentences with preverbal and sentence final *tsai*^{21}*ko*^{24}. We have seen most of the material above. Here we put it together in one place.

2.5.1 *ta*^{21} with negation

We have seen in section 2.2.2.1 that *ta*^{21} can be used in negative sentences, but only in sentences with the progressive reading.

(50) a. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG watch TA TV
'He watched TV.'
b. t^{h}a^{33} mau^{21} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG NEG watch TA TV
'He is not watching TV.'
NOT: 'He did not watch TV.'

c. t^{h}a^{33} mau^{21} k^{h}an^{45} tiən^{45}si^{41}.
3SG NEG watch TV
'He did not watch TV.'

ta^{21} in (50a) is used as a perfective marker, and the action is understood as having been completed. In (50b), where the negative marker *mau*^{21} is used, *ta*^{21} can still appear, in which case, however, *ta*^{21} cannot be interpreted as a perfective marker, but only as a progressive marker. In (50c), the negative marker *mau*^{21} is used without *ta*^{21}, and the sentence only has completion reading.

Chángshā *mau*^{21} is similar to Mandarin *méi* (*yǒu)* 'not have', in which *yǒu* 'have' is the marker of the perfective, the counterpart of *le* in negative sentences (Wang 1965). *yǒu* is often omitted, just leaving *méi* 'not', but the association with *yǒu* remains, so *méi* then means 'not have'. In Mandarin *méi* (*yǒu*) 'not have' cannot co-occur with the perfective marker *le* because both *yǒu* 'have' and *le* are both perfective markers. For example, the counterpart of (50) in Mandarin is (51).

(51) a. tā kàn le diànshì
3SG watch PERF TV
'He watched TV.'
b. * tā méi (yǒu) kàn le diànshì.
3SG NEG have watch PERF TV
Intended: 'He did not watch TV.'
c. tā méi (yǒu) kàn diànshì
3SG NEG have watch TV
'He did not watch TV.'

So *le* and its negative counterpart *méi* (*yǒu*) cannot co-occur. The same can be said of the counterparts of *le* and *méi* (*yǒu*) 'not have' in Chángshā, *ta*^{21}$_{\text{PERF}}$ and *mau*^{21} respectively: perfective *ta*^{21} and negative perfective *mau*^{21} cannot co-occur, as is clear from (50), which corresponds to the Mandarin situation in (51). This leads to the conclusion that the *ta*^{21} we do find with *mau*^{21} cannot be perfective *ta*^{21}. It must be another marker and, as we noted above, the meaning of these sentences suggests that it is a marker of the progressive.

2.5.2 *ta*^{21} with adverbial modifiers

As shown in section 2.2.2.2, with an activity verb modified by a manner adverb, *ta*^{21} can be interpreted as a progressive marker and it also can be interpreted as a perfective marker. This is once again illustrated in (52) - (53).

(52) a. t^{h}a^{33} k^{h}an^{41} ta^{21} tiən^{45}si^{41}.
3SG watch TA TV
'He watched TV.'
NOT: 'He is watching TV.'

b. t^{h}a^{33} zən^{21}zən^{21}tsən^{33}tsən^{33} ti k^{h}an^{41} ta^{21} tiən^{45}si^{41}.
3SG attentively watch TA TV
'He watched TV attentively.'
'He is watching TV attentively.'

(53) a. tsan^{33}san^{33} ɕi^{33} ta^{21} i^{33} fu.
wash TA clothes
'Tsansan washed his clothes.'

b. tsan^{33}san^{33} xə^{41} pu^{41} tɕin^{13}iuan^{21}ti ɕi^{33} ta^{21} i^{33}fu.
very NEG willingly wash TA clothes
'Tsansan washed his clothes very unwillingly.'
'Tsansan is washing his clothes very unwillingly.'

In (52a), *ta*^{21} can only have one interpretation; while in (52b), in which the sentence is modified by the manner adverb *zən*^{21}*zən*^{21}*tsən*^{33}*tsən*^{33}*ti* 'attentively', both the progressive and the completion reading of *ta*^{21} are available (52b). The same is true in (53b), where the adverb *pu*^{41} *tɕin*^{13}*iuan*^{21}*ti* 'unwillingly' is used and the sentence has two readings. In (53a), where there is no adverb, the sentence has only one reading. The observation that *ta*^{21} is ambiguous can also be made in the sentences modified by locative or instrumental adverbs. This can be seen in (54) - (55).

(54) t^{h}a^{33}mən tsai^{21} la^{45}li tɕi^{41} ta^{21} fan^{13}tsi.
3PL LOC there build TA house
'They built houses there (the houses have been built).'
'They are building houses (in the process of building houses).'

(55) t^{h}a^{33} in^{21} tsuo^{41}sou^{41} ɕiə^{41} ta^{21} tsi^{21}.
3SG use left hand write TA character
'He wrote characters with his left hand.'
'He was writing with his left hand.'

In (54) - (55), a locative phrase or instrumental adverb is used, and *ta*^{21} can have either of the two readings.

2.5.3 *ta*^{21} with pre-verbal and sentence final *tsai*^{21}*ko*^{24}

Our third observation has to do with the use of *ta*^{21} with preverbal and sentence final *tsai*^{21}*ko*^{24}. In section 2.2.2.3, we pointed out that preverbal *tsai*^{21}*ko*^{24} is a progressive marker in Chángshā. We saw that *ta*^{21} can be used with preverbal *tsai*^{21}*ko*^{24}, in which case the sentence produces a progressive reading. If *ta*^{21} is a perfective marker, it is hard to explain the combination with the preverbal progressive marker *tsai*^{21}*ko*^{24}.

Furthermore, to treat *ta*^{21} exclusively as a perfective marker is also questionable if we consider the use of *ta*^{21} in activities modified with sentence final *tsai*^{21}*ko*^{24}. We know that when sentence final *tsai*^{21}*ko*^{24} is used in sentences containing an activity verb and *ta*^{21}, the action can only be interpreted as ongoing, which is not the case for sentences with an achievement. Though it is not clear yet whether the progressive reading comes from *ta*^{21} or *tsai*^{21}*ko*^{24} (we will get to that below), for the following examples we first point out that it is not sensible to treat *ta*^{21} as a perfective.

(56) a. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41} tsai^{21}ko^{24}.
3SG watch TA TV TSAIKO
'He is watching TV.'
NOT: ‘He watched TV.’

b. t^{h}a^{33} tɕi^{41} ta^{21} i^{24} tən^{45} fan^{13}tsi^{41} (tsai^{21}ko^{24})
3SG build TA one CL house TSAIKO
'He has built a house.'

The action in (56a) can only be interpreted as ongoing, while in (56b) it can only be interpreted as having been completed. Both sentences have *ta*^{21} and *tsai*^{21}*ko*^{24}, but in (56b) *tsai*^{21}*ko*^{24} is not obligatory. Apparently, in (56b), the presence or absence of *tsai*^{21}*ko*^{24} makes no difference for the interpretation of the sentence; it does not seem to contribute any meaning at all (but see below). In (56a), its presence or absence does make a difference: only with *tsai*^{21}*ko*^{24} present do we get the progressive reading. However, we cannot conclude from this that the progressive reading comes from *tsai*^{21}*ko*^{24}, since in order to get the progressive reading, *ta*^{21} is also obligatory, so the progressive reading might as well come from *ta*^{21}. In other words, sentences with *tsai*^{21}*ko*^{24} do not lead to the conclusion that *ta*^{21} is always a perfective marker and indeed may lead to the conclusion that it sometimes is not, and that in those cases it is a progressive marker. In section 2.6.2, we will argue that the sentence final *tsai*^{21}*ko*^{24} is not a marker of the progressive. There are cases in which *tsai*^{21}*ko*^{24} is used without producing a progressive reading. This can already be seen in (56b) above: in an accomplishment event, *tsai*^{21}*ko*^{24} is optional, and the sentence produces a completion reading.

In view of the above, I conclude that it is better not to treat *ta*^{21} exclusively as a perfective marker. Instead, I propose that there are two markers that share the same form: *ta*$^{21}_{\text{PERF}}$, a perfective marker, and *ta*$^{21}_{\text{PROG}}$, a progressive marker.

In taking this "two *ta*^{21}s" approach, I am left with two questions to answer:

1) How can we tell the two particles apart?

2) We have seen that when *ta*^{21} is used as a progressive marker, the sentence always needs some extra elements (e.g. preverbal or sentence final *tsai*^{21}*ko*^{24}, negation, or adverbial modification), while this is not the case for the use of *ta*^{21} as a perfective marker. The question is: What properties do these contexts share, which enable them to license *ta*^{21} to be used as a progressive marker (because that is what they seem to do)?

To answer these questions, I would like to start with the use of *ta*^{21} with sentence final particle *tsai*^{21}*ko*^{24}. Since we have seen above that a sentence modified by sentence final *tsai*^{21}*ko*^{24} can get a progressive reading and that on the face of it, it is not clear where the reading of ongoingness comes from, it is possible that *tsai*^{21}*ko*^{24} produces the reading of ongoingness, in which case we need to determine what *ta*^{21} is used for. Alternatively, *ta*^{21} is the progressive marker, we need to see what the function of *tsai*^{21}*ko*^{24} is.

In what follows I first argue against the two traditional views on the use of sentence final *tsai*^{21}*ko*^{24}, one of which treats it as a sentence final mood particle, while the other takes it as a progressive marker, the same marker as the preverbal *tsai*^{21}*ko*^{24}. I subsequently provide an analysis of the semantic interpretation of sentence final *tsai*^{21}*ko*^{24}.

2.5.4 Summary

In this section, I have argued for the claim that there exist two particles, *ta*$^{21}{}_{\text{PERF}}$ and *ta*$^{21}{}_{\text{PROG}}$. I first showed that in sentences modified by some manner adverbs, two interpretations are available, while in sentences modified by the preverbal progressive marker and negative adverbs, *ta*^{21} can only be interpreted as progressive. Our analysis has shown that whenever *ta*$^{21}{}_{\text{PROG}}$ is used, it always needs some other elements to accompany it. In the analysis presented below, we are going show that these 'other elements' share something that makes it possible for *ta*$^{21}{}_{\text{PROG}}$ to be used.

2.6 Interpreting sentence final *tsai* ^{21}*ko*^{24}

2.6.1 Is sentence final *tsai* ^{21}*ko*^{24} a mood particle?

Mandarin, just like most other varieties of Chinese, has a number of discourse-oriented particles appearing at the end of a sentence to expresses the speaker's mood, attitude and emotion. They are referred to as mood particles, and treated as heads of functional projections in the CP domain (Li 2006).

Following Li (2006), in the present thesis, I assume that there is a functional projection, MoodP, expressing the illocutionary force in C. For instance, sentence final particle *ne* in Mandarin, as well as its cognate *lɛ* in Chángshā, indicates an affirmative mood; they are supposed to head a C-projection.

In the traditional analysis, the sentence final *tsai*^{21}*ko*^{24} in Chángshā is sometimes treated as a sentence final particle, used to express the affirmative force of the sentence (Qú 2007). Pointing at sentences like (57) - (58) (from Qú 2007:53), Qú observes that *tsai*^{21}*ko*^{24} is optional: it can be omitted without consequences for the grammaticality of the sentence.

(57) mən^{24} k^{h}ai^{33} ta^{21} (tsai^{21}ko^{24}) .
door open TA TSAIKO
'The door has been opened.'

(58) tɕ^{h}ian^{13}shan^{21} kua^{54} ta^{21} xua^{21} (tsai^{21}ko^{24}).
wall on hang TA picture TSAIKO
'There are pictures hanging on the wall.'

Qú (1997) suggests that it is only used for the purpose of emphasis, and that, as such, it can be treated as a mood particle.

The idea that sentence final *tsai*^{21}*ko*^{24} (or *tsai*^{21}, the variety of *tsai*^{21}*ko*^{24}*li* 'here', in other dialects) is treated as a mood particle is not new in the literature on dialects. For example, Wú (1998) holds that in the Wǔhàn dialect, sentence final *tsai*^{21} expresses an affirmative force. Xiāng (2000) treats sentence final *tsai*^{21} in the Yīngshān dialect in the same way.

However, I do not think that *tsai*^{21}*ko*^{24} in Chángshā functions as an affirmative mood marker. (57) - (58) cover only part of the usage of *tsai*^{21}*ko*^{24}. In fact, as we have seen, for an action to be represented as ongoing, *tsai*^{21}*ko*^{24} is obligatory. (56a) is repeated as (59).

(59) a. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41} tsai^{21}ko^{24}.
3SG watch TA TV TSAIKO
'He is watching TV.'

b. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG watch TA TV
NOT: 'He is watching TV.'
'He watched TV.'

In (59), *tsai* ^{21}*ko*^{24} can be left out; however, if it is left out, the progressive reading of the sentence becomes unavailable: compare (59a) with (59b). The minimal pair in (59) shows that *tsai*^{21}*ko*^{24} plays a role in whether a sentence that also contains *ta*^{21} can have a progressive meaning. Given the established analysis of mood particles, in which a mood particle can be deleted without affecting the grammaticality of the sentence, it does not seem to be sensible to treat sentence final *tsai*^{21}*ko*^{24} as a mood particle.

2.6.2 Sentence final *tsai*^{21}*ko*^{24} ≠ preverbal *tsai*^{21}*ko*^{24}

Traditionally, linguists often argued that both pre-verbal and sentence final *tsai*^{21}*ko*^{24} are progressive markers (H è 1997). The main reason is that with both particles a sentence can have a reading of the progressive (H è 1997). (55a) - (55b) are repeated in (60a) - (60b), in (60c) the preverbal *tsai* ^{21}*ko*^{24} is given.

(60) a. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41} tsai^{21}ko^{24}.
3SG watch TA TV TSAIKO
'He is watching TV.'
b. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG watch TA TV
'He watched TV.'
c. t^{h}a^{33} tsai^{21}ko^{24} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG TSAIKO watch TA TV
'He is watching TV.'

In (60b), *ta*^{21} is used as a perfective marker, in (60a), where sentence final *tsai*^{21}*ko*^{24} is added, the action described is interpreted as ongoing, in (60c), the sentence is presented in the progressive aspect by preverbal *tsai*^{21}*ko*^{24}. So the question arising from these sentences is: Where does the progressive reading in

(60a) come from? We might argue that the ongoingness reading comes from sentence final *tsai*^{21}*ko*^{24}, since what distinguishes (60a) from (60b) is the fact that sentence final *tsai*^{24}*ko*^{21} is added to the former, with the meaning change as a consequence. If sentence final *tsai*^{21}*ko*^{24} expresses the ongoingness of the action, we can argue that *tsai*^{21}*ko*^{24} has turned the sentence into a progressive. In that case, we can say that both the preverbal and sentence final *tsai*^{21}*ko*^{24} are used as a progressive marker (Hè 1997). However, this hypothesis quickly turns out to be untenable. I have at least five arguments for not treating sentence final *tsai*^{21}*ko*^{24} in the same way as preverbal *tsai*^{21}*ko*^{24}. The first consideration is that there are predicates, mostly certain types of stative predicates, that are compatible with sentence final, but not with preverbal, *tsai*^{21}*ko*^{24}, as is exemplified in (61).

(61) a. ŋo^{41} lau^{41} ko^{24} tʰən^{45} ta^{21} tsai^{21}ko^{24}.
1SG head ache TA TSAIKO
'I am having a headache.'
b. *ŋo^{41} tsai^{21}ko^{24} lau^{41}kʰo^{24} tʰən^{45} ta^{21}.
1SG PROG head ache TA
c. *ŋo^{41} tsai^{21}ko^{24} lau^{41} kʰo^{24} tʰən^{45}.
1SG TSAIKO head ache

In principle, there are two possible explanations. One is to assume that they are both progressive markers and that differences between them are related to their different positions. The other is that they are not the same elements, for instance, that, unlike preverbal *tsai*^{21}*ko*^{24}, sentence final *tsai*^{21}*ko*^{24} is not a progressive marker. This could explain (61), in which the real progressive marker, preverbal *tsai*^{21}*ko*^{24}, is not allowed in front of the stative predicate; after all, despite the translation, states generally do not co-occur with the progressive.

Secondly, that the two *tsai*^{21}*ko*^{24}s are different is also clear from the fact that sentence final *tsai*^{21}*ko*^{24} can co-occur with preverbal locative phrases, while this does not apply to preverbal *tsai*^{21}*ko*^{24}. Note that for Mandarin, it is widely assumed that the progressive marker *zài* has developed from a locative preposition (Shi 2006:15). So the default reading of a sentence with a preverbal

locative phrase without any aspectual particles is progressive. The same is true for Chángshā, explaining why the action in (62a) with the locative phrase *tsai*^{21} *tɕia*^{33} *li* 'at home' is interpreted as ongoing.

(62) a. t^{h}a^{33} tsai^{21} tɕia^{33} li k^{h}an^{45} tiən^{45}si^{41}.
3SG LOC home in watch TV
'He is watching TV at home.'

b. t^{h}a^{33} tsai^{21} tɕia^{33} li kan^{45} ta^{21} tiən^{45}si^{41} tsai^{21}ko^{24}.
3SG LOC home in watch TA TV TSAIKO
'He is watching TV at home. '

c. *t^{h}a^{33} tsai^{21} {tsai^{21}ko^{24}} tɕia^{33} li {tsai^{21}ko^{24}}
3SG LOC TSAIKO home in TSAIKO
kan^{45} tiən^{45}si^{41}.
watch TV

The locative phrase *tsai*^{21} *tɕia*^{33}*li* 'at home' is used in (62a) not only to provide spatial information for the event but also to indicate that the action is ongoing. Sentence final *tsai*^{21}*ko*^{24} is compatible with such locative, as is clear from (62b). There is not much difference in interpretation between (62a) and (62b), except for the fact that in (62b), there is more emphasis on the state of the ongoingness of the action. By contrast, preverbal *tsai*^{21}*ko*^{24} (62c) cannot co-occur with a preverbal locative phrase *tsai*^{21} *tɕia*^{33}*li* 'at home'. This might be because the preverbal locative phrase *'tsai*^{21} *tɕia*^{33}*li* ' at home' and preverbal progressive marker *tsai*^{21}*ko*^{24} would occupy the same position. It is also possible that they are incompatible because they both express the same notion: the progressive. If the latter is the right reason, sentence final *tsai*^{21}*ko*^{24} should perhaps not be treated as a progressive marker.

Thirdly, as I pointed out above, the preverbal *tsai*^{21}*ko*^{24} can present an action as ongoing on its own, while this is not the case for sentence final *tsai*^{21}*ko*^{24}. This alone can be seen as an important fact if one wants to determine the status of sentence final *tsai*^{21}*ko*^{24}. See (63).

(63) a. tsan^{33}san^{33} tsai^{21}ko^{24} k^{h}an^{45} tiən^{45}si^{41}.
PROG watch TV
'Tsansan is watching TV.'
b. *tsan^{33}san^{33} k^{h}an^{45} tiən^{45}si^{41} tsai^{21}ko^{24}.
watch TV TSAIKO
Intended: 'Tsansan is watching TV.'

Fourthly, the two particles behave differently in negative sentences (this could be related to the previous point): preverbal *tsai*^{21}*ko*^{24} can be used in negative constructions, while this is not possible for sentence final *tsai* ^{21}*ko*^{24}.

(64) a. tsan^{33}san^{33} mau^{21} tsai^{21}ko^{24} k^{h}ən^{45} tiən^{45}si^{41}.
NEG PROG watch TV
'Tsansan is not watching TV.'
b. *tsan^{33}san mau^{21} k^{h}an^{45} tiən^{45}si^{41} tsai^{21}ko^{24} .
NEG watch TV TSAIKO
'Intended: ‘Tsansan is not watching TV.'

Whatever the explanation of this difference may be, it shows that the two elements are not to be treated the same.

Finally, not only can sentence final *tsai* ^{21}*ko*^{24} not express the progressive by itself, but certain types of sentences in which it occurs do not even have a progressive meaning. This is the case with sentences containing achievement or accomplishment predicates.

(65) a. la^{33} tɕi^{33} tiu^{33} ta^{21} t^{h}ən^{41} li^{33} (tsai^{21}ko^{24}).
rubbish throw TA bin in TSAIKO
'The rubbish has been thrown into the bin.'
b. t^{h}a^{33} ɕi^{41} ta^{21} i^{24} tɕian^{21} i^{33}fu^{24} (tsai^{21}ko^{24}).
3SG wash TA one CL clothes TSAIKO
'He has washed a piece of clothes.'

The verbs in (65) are accomplishments, and *ta*^{21} can only be interpreted as a perfective marker. Note that *tsai*^{21}*ko*^{24} is optional in this sentence. The point

of these examples is that sentences with *tsai*^{21}*ko*^{24} do not always produce a progressive reading and that, as a consequence, it may not be correct to take it as a progressive marker and as the same as preverbal *tsai*^{21}*ko*^{24}.

The above discussion shows that *tsai* ^{21}*ko*^{24} is not a mood particle, nor can it be treated as a progressive marker. There are not only distributional but also interpretational differences between sentence final *tsai*^{21}*ko*^{24} and preverbal *tsai*^{21}*ko*^{24}. Having established this, I put forth the hypothesis that the reading of ongoingness of the sentence modified by sentence final *tsai*^{21}*ko*^{24} comes from *ta*^{21}. Then the immediate question is: What is *tsai*^{21}*ko*^{24} used for? Put differently, what is the relation between the use of *ta*^{21} and sentence final *tsai*^{21}*ko*^{24}? Before we provide an answer to this question, I will first provide an analysis of the semantic interpretation of sentence final *tsai* ^{21}*ko*^{24}. I am going to propose that the reading of sentence final *tsai* ^{21}*ko*^{24} is relevant to the reading of present tense.

2.6.3 Sentence final *tsai* ^{21}*ko*^{24} : a reading of present tense

In this section, I propose that *tsai* ^{21}*ko*^{24} contributes temporal location to the sentence. More specifically, sentence final *tsai* ^{21}*ko*^{24} is used to indicate that the situation time of a sentence overlaps with speech time.

First, the use of *tsai* ^{21}*ko*^{24} with placement verbs can help us to argue for the idea that its main function is to locate the situation in the present tense, as in (66).

(66) a. tɕ^{h}ian^{13} san^{21} kua^{45} ta^{21} fa^{21}.
wall on hang TA picture
'There are some pictures on the wall.'
b. tɕ^{h}ian^{13}san^{21} kua^{54} ta^{21} fa^{21} tsai^{21}ko^{24}.
wall on hang TA picture TSAIKO
'Some pictures are on the wall (as you can see now).'

Sentence final *tsai* ^{21}*ko*^{24} is optional in (66), and *ta*^{21} can therefore be interpreted as a perfective marker indicating that the action has been completed, the reading of the duration of the result state from the action is derived from the

action: after you hang a picture on the wall, it is hanging there (see the beginning of 2.5 above). In (66b), *tsai*^{21}*ko*^{24} is used, and the speaker places more emphasis on the present state of the picture on the wall. We can imagine a situation to distinguish between the two sentences: for example, Tsansan asks Lisi to hang a picture on the wall, and if there is already a picture on the wall, Lisi would say (66b) rather than (66a). In this way, Lisi is saying that there is a picture on the wall, "as we speak". So in fact by uttering this sentence, Lisi intends to relate the event time, the time when the picture is on the wall to the speech time. (66a), on the other hand, does not have such an actuality implication.

Observe that sentence final *tsai*^{21}*ko*^{24} is not compatible with temporal phrases indicating a future event and a past event.

(67) a. *t^{h}a^{33} kan^{33} ts^{h}ai^{13} k^{h}an^{45} ta^{21} tiən^{45}si^{41} tsai^{21}ko^{24}.
3SG just now watch TA TV TSAIKO
Intended: 'He was watching TV just now.'

b. *min^{13}tian^{33} ko^{21}ko^{41}si^{13}x ou^{21}, t^{h}a^{33} k^{h}an^{45} ta^{21}
tomorrow this time 3SG watch TA
tiən^{45}si^{41} tsai^{21}ko^{24}.
TV TSAIKO
'At this time tomorrow, he will be watching TV.'

The above shows that sentence final *tsai* ^{21}*ko*^{24} is used to help locate an event in time, and the sentence modified with sentence final *tsai* ^{21}*ko*^{24} can only obtain a present tense reading.

Sybesma (2004, 2007) suggests that Mandarin and Cantonese languages do have tense, but do not express it using verbal suffixes. He observes that Cantonese sentence final particle *lei*^{4} is used to express past events, while *ge*^{3} takes care of the non-past. He proposes that *lei*^{4} and *ge*^{3} are possible instantiations of a tense operator in the C-domain of a Cantonese sentence (possibly FinP), which set the value of the head of the TP to plus or minus past ([–/+PAST]). (68) - (69) are from Sybesma (2004).

(68) a. go[2]-di[1]-syu[1], aa[3]-ji[6]-suk[1] wui[5] luk[6] zuk[6] gei[3] faan[3]
that CL book, 2SG uncle will continue send- back
lei[4] (ge[3]).
come GE
Without GE: 'as to those books, Second Uncle will continue to send them to us.'
With GE: 'as to those books, Second Uncle will continue to send them to us-for sure, don't worry about it.'

b. keoi[5] sik[1] Dak[1]man[2] (ge[3])
3SG know German GE
Without GE: 'S/he knows German.'
With GE: 'don't worry, s/he knows German.'

(69) keoi[5] hai[2] Rotterdam zyu[6] (lei[4])
3SG at Rotterdam live LEI
Without *lei*[4]: 'S/he lives in Rotterdam.'
With *lei*[4]: 'S/he used to live in Rotterdam.'

In (68), sentence final *ge*[3] is optional, but without *ge*, the sentences present a general statement, a general truth, while with *ge*[3] the statement is relevant to the current moment. In (69), we see very clearly the effect of adding *lei*[4]*:* without it, the sentence reads as a present tense, with it, it has become a statement about a situation in the past. According to Sybesma (2004), the sentence final elements *ge*[3] and *lei*[4] occupy C-head positions, from which they influence the setting of the head of TP. I assume that the same happens in Chángshā. Specifically, I point out that the sentence final *tsai*[24]*ko*[24] is a tense element in the C-domain and functions like *ge*[3] in Cantonese: binding a variable in T, setting the value of T as present.

To further support the analysis of sentence final *tsai*[21]*ko*[24] as a present tense operator, I provide an analysis for another sentence final particle in Chángshā: *k*[h]*ə*[45]*lai*[13].

k[h]*ə*[45]*lai*[13] can only appear at the end of a sentence. It is traditionally treated as an experiential aspect (Zhōu 1998) or anterior (Perfect) aspect marker (Wǔ 1999). Zhōu claims, "*k*[h]*ə*[45]*lai*[13]" signifies a temporal gap between the time of

the action/activity and the time of utterance or time specified in the context." (70a) - (70b) are from Zhou (1998:11).

(70) a. tsan^{33}san^{33} k^{h}an^{45} ko^{24} pən^{41} xu^{33} k^{h}ə^{45}lai^{13}.
read this CL book KHELAI
'Tsansan was reading this book.'
b. tsan^{33}san^{33} kə^{45} ɕio^{24}xiao^{45} k^{h}ə^{45}lai^{13}.
go school KHELAI
'Tsansan went to school.'

(70) can be used to answer a question like: "Where was Tsansan?" By saying (70), the speaker says that Tsansan was reading the book or had gone to school, implying that why the speaker did not see him.

Different from Zhōu, Wǔ (1999) treats *k^{h}ə^{45}lai*^{13} as a Perfect aspect marker, indicating that the action has finished in the past but is still connected to the utterance time. Wǔ (1999) uses Anterior to replace Perfect, and defines the anterior aspect marker as an element that "… signals that the situation has occurred prior to the reference time and is relevant to the situation at another time" (Wǔ 1999:8). (71) is from Wǔ (1999:79).

(71) a. xao^{41} tsiəu^{41} mau^{21} k^{h}an^{45}tau^{45} li^{41} ta^{21}, li^{41} k^{h}ə^{45} la^{41}li
long time NEG see 2SG Mod 2SG go where
k^{h}ə^{45}lai^{33} la?
KHELAI QM
'I have not seen you for a long time. Where did you go?'
b. ŋo^{41} k^{h}ə^{45} Shan^{21}hai^{41} k^{h}ə^{45}lai^{13}.
1SG go Shanghai KHELAI
'I went to Shanghai.'

I suggest that *k^{h}ə^{45}lai*^{13} should not be treated as anterior or experiential aspect, but rather as a tense operator. Its main function is to place the situation time of the sentence before the speech time as a [+PAST] counterpart to *tsai*^{21}*ko*^{24}, comparable to Cantonese *lei*^{4}.

My first argument comes from the observation that *k^{h}ə*^{45}*lai*^{13} has nothing to do with the present situation; it just indicates a past event, as is clear from the interpretation in (72a). To better see that *k^{h}ə*^{45}*lai*^{13} is used to locate the sentence in time, we compare *k^{h}ə*^{45}*lai*^{13} with *ta*^{21} in its perfective use (72a) - (72b).

(72) a. tsan^{33}san^{33} lai^{13} k^{h}ə^{45}lai^{13}.
come KHELAI
'Tsansan was here (now he has left).'
b. tsan^{33}san^{33} lai^{13} ta^{21}.
come TA
'Tsansan has come (he is here).'

In (72a), *k^{h}ə*^{45}*lai*^{13} is used, and the sentence means that Tsansan was here, but he has now left; on the other hand, (72b), with *ta*^{21}, means that Tsansan has come and he is still here now. The comparison shows that *k^{h}ə*^{45}*lai*^{13} has nothing to do with the present tense. That *k^{h}ə*^{45}*lai*^{13} is relevant to the past event reading also can be seen in (73).

(73) a. tsan^{33}san^{33} pin^{21} k^{h}ə^{45}lai^{33}.
ill KHELAI
'Tsansan was ill.'
b. tsan^{33}san^{33}pin^{21} ka^{41} ta^{21}.
ill KA TA
'Tsansan has fallen ill.'

(73a) means that Tsansan was ill, but has now recovered, while (73b), with *ta*^{21} (and *ka*^{41} to which we turn in the next chapter), gets a change of a state reading: Tsansan has fallen ill.

My second argument is relevant to the observation that *kə*^{41}*lai*^{13} focuses on the location of an action on the temporal axis; it does not say much about the presentation of the temporal structure of an event.

(74) a. la^{45} poŋ^{13} tɕiao^{41}tsi la^{41} ko^{54} tɕia^{24} k^{h}ə^{45}lai^{13}?
that CL dumpling who eat KHELAI
'Who ate from the plate of dumplings?'

b. la^{45} poŋ^{13} tɕiao^{41}tsi la^{41}ko^{54} tɕia^{24} ka^{41} ta^{21}?
that CL dumpling who eat KA TA
'Who has eaten that plate of dumplings?'

(74a) means that the speaker asks who ate dumplings in the dish. When the sentence is uttered, there are still some dumplings left. In using (74b), there are no dumplings left. The comparison in (74) shows that *k^{h}ə^{45}lai^{13}* focuses on the action itself: it indicates that there was a certain action, in this case eating dumplings, in the past. *ta*^{21}, on the other hand, focuses more on the presentation of the event as a whole, including the endpoint. (75) also illustrates this.

(75) a. la^{45} tɕiən^{21} i^{33}fu ŋo^{41} ɕi^{41} k^{h}ə^{45}lai^{33} (ɕi^{41} pu^{45} kan^{33}tɕin^{41}).
that CL clothes 1SG wash KHELAI wash NEG clean
'I washed (was washing) that piece of clothing (but failed to wash it clean.'

b. la^{45} tɕiən^{21} i^{33}fu ɕi^{41} ka^{41} ta^{21} (*ɕi^{41} pu^{45} kan^{33}tɕin^{41}).
that CL clothes wash KA TA, wash NEG clean
'(I) have washed that piece of clothing (*but failed to wash it clean).'

In (75a), *kə*^{45}*lai*^{13} is used; the speaker means that he did some washing, but no claim is made to the effect that it was successfully concluded; that is why the follow-up sentence denying successful completion can be added. All he is saying is that there was an event of washing and it is located before the time of speech. In (75b), *ta*^{21} is used (with *ka*^{41}), and the clause stating that I failed to wash the clothes clean is not allowed here. This is due to the fact that *ka*^{41} and *ta*^{21} express that the action has been completed and completing an act of washing implies that whatever one was washing will have become clean, while *kə*^{45}*lai*^{13} only indicates that an action of washing took place at some point before the utterance time. In (75a), the speaker means that he went through the motions of washing, but because there is no question of him completing the act of washing, there is no implication of having washed the clothes clean.

Finally, observe that *k*^{h}*ə*^{45}*lai*^{13} is often used to indicate that someone did something in the recent past time.

(76) A: la^{41}ko^{45}tso^{21} ŋo^{41} ti^{21} i^{41}tsi k^{h}ə^{45}lai^{13}?
who sit my chair KHELAI
'Who sat on my chair?'
B: ŋo^{41} tso^{21} k^{h}ə^{45}lai^{13}.
1SG sit KHELAI
'I did.'

(77) A: li^{41} o^{24}kai^{41} mau^{21} ɕi^{41} i^{33}fu la^{41}?
2SG why NEG wash clothes QM
'Why did not you wash the clothes?'
B: pu^{24}tə kən^{45} lə, ŋo^{41} shan^{21} kai^{33} k^{h}ə^{45} lai^{13}.
NEG free SFP, 1SG go street KHELAI
'I was not free, I was out shopping.'

(78) A: a^{13} tsi ku^{24} tə ko^{24}yan^{21} shan^{33}xin^{33}, li^{41} mau^{41} ta^{41}
child cry SUB so sad 2SG NEG hit
t^{h}a^{33} k^{h}ə^{45}lai^{13} pa?
him KHELAI QM
'The child is crying so hard, is it because you hit him?'
B: ŋo^{41} ta^{41} t^{h}a k^{h}ə^{45} lai^{13}? pu^{24} ko^{41} lən^{13} lo^{33}.
1SG hit 3SG KHELAI NEG possible MP
'I hit him? Impossible.'

In (76) - (78), *kə*^{45}*lai*^{13} is used to express a past tense, to report about a past event. For example, in (76A), the speaker may find that the chair had been moved a little, or there was some signs showing that someone just sat on his chair. By asking the question, he was in fact verifying whether someone sat on his chair, that is, the sentence focuses on the taking place of a past event (there is obviously no-one sitting in the chair now).

The above facts indicate that *kə*^{45}*lai*^{13} is better treated as a tense element indicating that the situation is set before the speech time. I assume without

further discussion, but with reference to what we find in Cantonese, that it is located in the CP-domain.

In sum, I argue that sentence final *tsai*^{21}*ko*^{24} and *kə*^{45}*lai*^{13} are two tense elements in the same way that the Cantonese elements introduced above are tense elements: they occupy a position in the CP domain, from which they determine or "set" the value of the head of TP. The former indicates present tense and the latter indicates past tense. The temporal feature of the two particles can be shown in (79).

(79) a. tsai^{21}ko^{24} [present]
b. k^{h}ə^{45}lai^{13} [past]

Now that we have seen that the interpretation of *tsai*^{21}*ko*^{24} is relevant to present tense, we turn to the question raised in section 2.6.1: What is the relation between sentence final *tsai*^{21}*ko*^{24} and *ta*^{21} when *ta*^{21} is used as a progressive marker? In what follows I provide a detailed analysis to show that the use of *tsai*^{21}*ko*^{24} functions as one of the mechanisms to license the use of *ta*^{21} as a progressive marker.

2.6.4 Summary

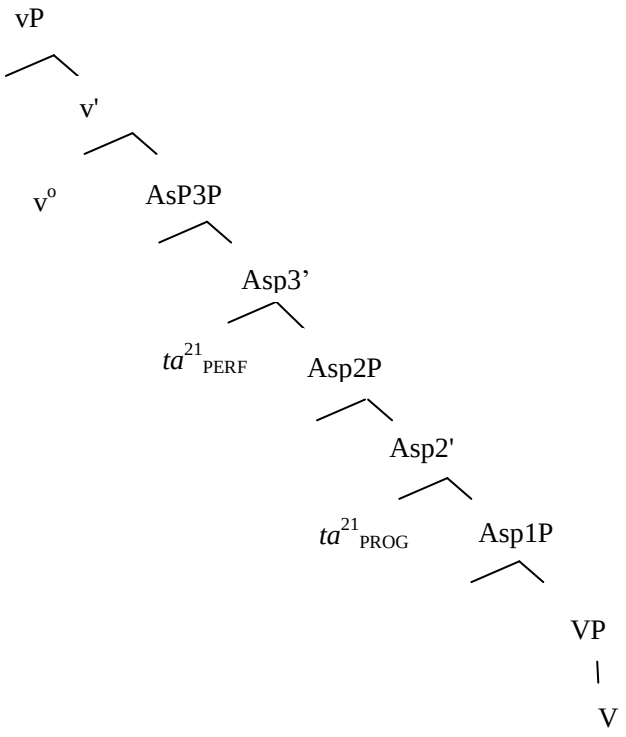
In this section, I provided an analysis to explain the function of sentence final *tsai*^{21}*ko*^{24}. I argued for the idea that the sentence final *tsai*^{21}*ko*^{24} is a tense element indicating that the situation is set before the speech time. It occupies a position in the CP domain, from which it determines or "sets" the value of the head of TP.

2.7 Distinguishing two *ta*^{21}s

In the above section, I point out that sentence final *tsai*^{21}*ko*^{24} is not a progressive marker, but a present tense operator. In this section, I will point out that the interpretation of sentence final *tsai*^{21}*ko*^{24} can help me distinguish *ta*$^{21}{}_{\text{PERF}}$ from *ta*$^{21}{}_{\text{PROG}}$. I assume that *ta*$^{21}{}_{\text{PERF}}$ is located in Asp3^{o}, and *ta*$^{21}{}_{\text{PROG}}$ is

located in Asp2^{o}. The main reason to justify the different positions of these two particles is that, as was introduced above, these two particles have different meanings: *ta*$^{21}_{\text{PERF}}$ is a perfective marker, indicating that an event has been terminated or completed and *ta*$^{21}_{\text{PROG}}$ is a progressive marker, indicating that an event is ongoing. The difference in meaning may be seen as an indication of a difference in position. This corresponds to the general insight that perfective aspect is located higher than progressive aspect, which is what Tsai (2008) applies to Mandarin as well (even if the concrete positions he assigns them to differ from mine). The structural positions I assume for *ta*$^{21}_{\text{PERF}}$ and *ta*$^{21}_{\text{PROG}}$ in the tree introduced in chapter 1 are indicated in (80).

(80)



2.7.1 Event argument licensing, *ta*^{21}$_{\text{PERF}}$ and *ta*^{21}$_{\text{PROG}}$

What we have seen in the previous sections is that in certain sentences, the element *ta*^{21} is a marker of the progressive, as long as it is accompanied by other material such as sentence final *tsai*^{21}*ko*^{24}, certain adverbs or negation, and a marker of the perfective without the condition that it be accompanied by such material in these contexts. I would like to propose that this can be explained in terms of tense anchoring, or, really, event argument licensing, developed by Tsai (2008).

2.7.2 Tense anchoring in Mandarin Chinese

Tsai's point of departure is constituted first by sentences like (81a) - (81b) (from Tsai 2008:677) which sound incomplete to native speakers even though they seem complete: the argument structure of the sentence is complete and there is an aspect marker, but it is somehow felt to be not completely right. That is why Tsai says they are "felt to be incomplete".

(81) a. % Akiū ná le shū.
take PERF book
'Akiu took a book(s). '
b. % Akiu pǎo zhe.
run IMP
'Akiu was running.'

His second point of departure is the theoretical point that every event variable must be bound by a tense operator or another type of operator, like a deontic or a negative operator. Tsai claims that the sentences in (81a) - (81b) are incomplete as a result of the failure to get the event variable bound. To get the event variable brought out, several strategies are available. The simplest is using tense. The event variable can seen as linked to what is called "semantic tense" and the event variable is brought out as soon as the semantic tense has been anchored to syntactic tense. Or, in Tsai's (2008:681) own words: "to get a semantic tense anchored to a morpho-syntactic structure, is to get the event variable spelled out. [This can be done] by various types of strategies. English has tense morphology which does the job" but Chinese tense is

"weak" and, as a result, "cannot bring out the event variable by itself." Consequently, additional measures need to be taken so as to make sure that the event variable can be brought out. As we will see in a moment, the additional measures can be divided into two groups, one group of measures which in different ways support the T-node in the sentence and another group which brings out the event variable independently of tense.

For example, in the syntactic tree that Tsai adopts (2008:683), there are two different aspectual projections for outer aspect markers: one is above vP, the other is lower than vP. According to Tsai, aspectual elements occupying the head of the upper projection can directly hook up with T and in that way "tense anchor" the event, but the elements in the lower one cannot do so. This raising of Asp to T is a way of making the T strong enough to bind the event variable, just like in English.

For Mandarin, Tsai takes preverbal progressive marker *zài* and experiential aspect suffix *guo* to occupy the higher outer aspect, while *le* and *zhe* occupy the aspect position below vP. As a result, according to Tsai, *zài* and *guo* can move up to T to strengthen T so as to enable it to license the event variable, while *le* and *zhe* are too low to do the same. This is why (81a) - (81b) with *le* and *zhe* respectively are ungrammatical or "incomplete", while (82a) with *guo* and (82b) with *zài* are fine.

(82) a. Akiu ná guo shū.
take EXP book
'Akiu took a book(s).'
b. Akiu zài kū.
PROG cry
'Akiu was crying.'

Still according to Tsai, if tense cannot do it, other operators bring out or bind the event variable ("Chinese employs all sorts of eventuality construals"; Tsai 2008:681). These have no direct relation to T (although, as we will see shortly, one of these, will be related to T after all, at least according to us), so that is why Tsai talks about a more general "Generalized Anchoring Principle". Examples of these eventuality construals are: sentence final *le*, negation, and event modification. These ways of licensing an event variable are illustrated as follows.

Sentence final *le* in Mandarin is an inchoative/evidential operator according to Tsai (2008:685). In a sentence modified by sentence final *le*, the event variable is brought out by being bound by this operator. That is why the incompleteness of the sentence is cancelled. (83) is from Tsai (2008:677 (6a), (6e)).

(83) a. % Akiū ná le shū .
take PERF book
'Akiu took a book(s) '
b. Akiū ná le shū le.
take PERF book SFP
'Akiu took a book(s).'

We can also look at this sentence from the perspective of tense binding introduced above, according to which an element like *le* in sentence final position can bind the tense variable in T (just like Cantonese *ge*[3] and *lei*[4]). If we look at *le* this way, sentence final *le* is actually more directly related to Tense than Tsai assumes.

Next, according to Tsai (2008), the negative operator is like deontic operators that can help bring out an event variable. This can be seen in (84) (Tsai 2008:677 (6a), (6d)).

(84) a. % Akiū ná shū.
take book
'Akiu take a book(s).'
b. Akiū yīnggāi/ mǎ ná shū.
should not take book
'Akiu should have/has not taken a book(s).'

In (84b), the negative operator *mǎ* 'not' or *yīnggāi* 'should' is used, and the incompleteness is cancelled. Note that in terms of Tsai (2008) the deontic operator in (84b) belongs to the same class as the negative operator.

Finally, the explanation of the function of event quantification is also relevant to event variable licensing. An event that is quantified must be one whose event variable is spelt out. For instance, when a sentence is quantified

by a quantificational adverb, the event argument must be syntactically accessible. See (85) (Tsai 2008:676 (1a)).

(85) Akiu yīzhí pǎo zhe.
continuously run IMP
'Akiu is running continuously.'

According to Tsai (2008), the adverb *yīzhí* 'continuously' modifies the event argument. By way of the modification, the event argument is made visible in syntax. As Tsai phrases it: "When an event argument is modified or predicated upon, it has to be visible in syntax" (Tsai 2008:682).

Tsai does not mention the case of manner adverbs, but as it turns out, they work in the same way, so we may as well add it to the inventory since manner adverbs can also function as licensors of the event argument, as is clear from the following Mandarin example:

(86) a. %Zhāngsān chàng zhe gē.
sing DUR song
b. Zhāngsān dàshēngde chàng zhe gē.
loudly sing DUR song
'Zhangsan is singing loudly.'

In (86a), the sentence sounds incomplete; however, in (86b) where a manner adverb *dàshēngde* 'loudly' is added, the incompleteness is gone. Obviously, manner adverbs can help spell out the event variable.

To sum up, I introduced Tsai (2008), where it is argued that the event variable in a predicate must be bound (“brought out” or “spelt out”) syntactically. The process of syntactic tense anchoring is one of the ways that languages use to do this. In languages with tense morphology, this process is straightforward. Tense in Mandarin, however, is "weak" as a result of which the situation is less straightforward. In Mandarin, an event argument is either brought out through syntactic derivation by the raising of Asp to T so as to make T strong enough to license the event argument, or it is made visible by

other strategies, which include event modification, event quantification and different types of operators

Importantly, for Tsai, not all aspectual elements can move up to T to make it strong so as to enable it to bind the event variable. This is one of the ideas in Tsai (2008) that I will use to explain the multifunctionality of *ta*^{21} in Chángshā.

2.7.3 Back to Chángshā

For the analysis of *ta*^{21}, we will follow the spirit of Tsai's proposal and adopt most but not all the details. So we adopt the basic idea that the event argument of an event must be brought out and that this can be done in different ways: by strengthening T or by using different means. The tree I have adopted is not exactly the same as the one in Tsai (2008), but, like Tsai, I assume, as we have argued, that aspectual markers expressing different semantics occupy different positions in the structure. In particular, in the structure I adopt, *ta*$^{21}{}_{\text{PERF}}$ occupies a position which is higher than *ta*$^{21}{}_{\text{PROG}}$.

In Chapter 1 we saw that Sybesma (2017) proposes a structure that involves three inner aspect positions. According to Sybesma, the main function of the middle one of these, Asp2P, is to make the activity denoted by the verb which leads up to the endpoint inaccessible for further syntactic operations. I adopt the idea that there is an aspectual position between the RealizationP (Asp1P) and TelicityP (Asp3P), but I will modify its function. I assume that the function of Asp2 depends on what occupies this position. It can be occupied by elements that perform the function Sybesma describes (blocking the verbal activity to undergo any further syntactic operations), but it can also be occupied by elements that indicate the opposite, namely that the action is in progress. So I assume that *ta*$^{21}{}_{\text{PROG}}$ is located in this position.

I locate *ta*$^{21}{}_{\text{PROG}}$ in Asp2P for the following reasons (but I will come back to the location of *ta*$^{21}{}_{\text{PROG}}$ in chapter 3, where the function of Asp2 will be further developed). First, as I have shown, in Chángshā there are two aspect markers that can be used to indicate the ongoingness of an action: preverbal *tsai*^{21}*ko*^{24} and postverbal *ta*$^{21}{}_{\text{PROG}}$. These two particles can co-occur. The *tsai*^{21}*ko*^{24} is like the progressive marker *zài* in Mandarin. It is widely assumed for Mandarin that both the progressive and the experiential aspect marker are

located in outer aspect position (Tsai 2008, Hú 2005 among many others). In view of its similarity in function, it makes sense to assume that *tsai*^{21}*ko*^{24} is located in the outer aspect position as well. Assuming that, like in Mandarin, V ends up in little v and observing that *ta*^{21}$_{\text{PROG}}$ follows the verb, *ta*^{21}$_{\text{PROG}}$ must be in a position lower than little v. Secondly, the data so far shows that *ta*^{21}$_{\text{PROG}}$ is different from *ta*^{21}$_{\text{PERF}}$ in the sense that *ta*^{21}$_{\text{PERF}}$ can be used on its own (in the sense that no other material needs to accompany it), while this is not the case for *ta*^{21}$_{\text{PROG}}$ and in Tsai's framework this would mean that they cannot occupy the same position. More specifically, only one of them is high enough to make a connection with and in so doing strengthen T to enable it to license the event argument: this one is *ta*^{21}$_{\text{PERF}}$. This means that *ta*^{21}$_{\text{PROG}}$ must be lower, which in the tree structure we adopted is Asp2P.

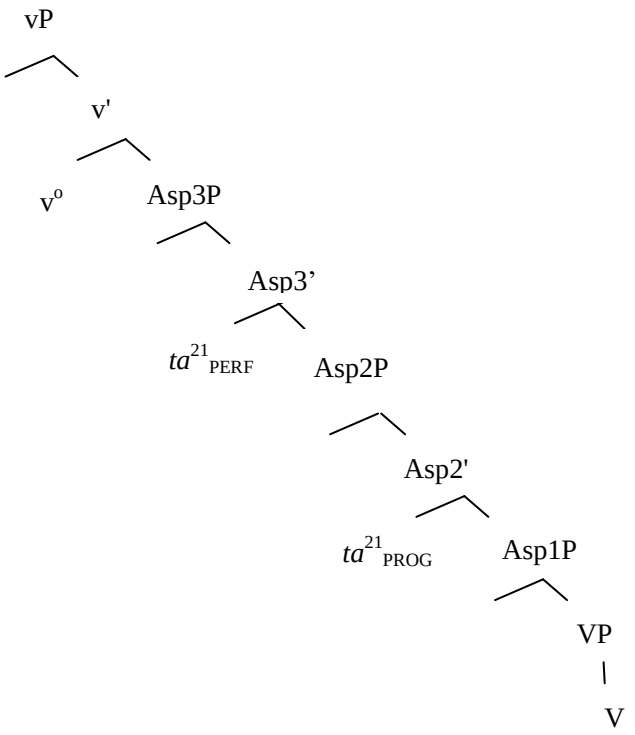
For the sake of completeness, I recall that, following Sybesma's (2017) ideas on the position of perfective *le*, that *ta*^{21}$_{\text{PERF}}$ is, like *le*, located in inner aspect position but interpreted in outer aspect position. The main reason is the same as why Sybesma argues *le* to be below vP, namely the order of the different elements in BA-sentences. Just like Mandarin *le*, Chángshā *ta*^{21}$_{\text{PERF}}$ always follows the verbal complex and if BA is in v^{0} then *ta*^{21}$_{\text{PERF}}$ cannot be in outer aspect (see for more details Chapter 1), despite the fact that that is the position where it is interpreted (see Chapter 1 and immediately below).

(87) a. tsan^{33}san^{33} ba^{41} sou^{41}juan^{45} ku^{24}de si^{24} ka^{41} ta^{21}.
BA handkerchief cry SUB wet KA PERF
'Tsansan cried such that the handkerchief got wet.'
b. tsan^{33}san^{33} ba^{41} sou^{41}juan^{45} ku^{24} si^{24} ka^{41} ta^{21}.
BA handkerchief cry wet KA PERF
'Tsansan cried such that the handkerchief got wet.'

Furthermore, what is positive is that the outcome of these language internal reasoning corresponds to what is assumed by others for languages more generally, namely that PERF is higher than PROG. Harwood (2015), for instance, claims that perfect aspect should be contained, along with tense and modality, in a phrase which is higher than progressive aspect, which is lower, along with voice and the lexical verb (Harwood 2015:559).

The position of *ta*^{21}$_{\text{PERF}}$ and *ta*^{21}$_{\text{PROG}}$ is presented in (88).

(88)



I have already said a few times that both *le* and *ta*^{21}$_{\text{PERF}}$, despite the fact that they are located in inner aspect, are interpreted in outer aspect. This was discussed in more detail in Chapter 1. It is important to emphasize that there is a difference between Mandarin and the Xiāng dialects in two, I think, correlating respects. First, whereas in the Xiāng dialect Chángshā *ta*^{21}$_{\text{PERF}}$ is able to strengthen T such that the latter is enabled to license the event argument, Mandarin *le* is not. The second difference is that the phenomenon that we see in the Xiāng dialect Chénxī, that both the outer and the inner aspect position are filled (see (89), repeated from Chapter 1), is not found in any Mandarin dialect. I suggest that these two differences are related: in the dialect group where we see that the relationship can be marked overtly (both positions are overtly filled; or, phrased differently: the outer aspect position is more active), the perfective marker can strengthen T so that it can bind the event argument, while in the dialect group where the relation is always covert (less active), the

perfective marker is unable to do so. Even though in Chángshā itself, the two positions are not simultaneously filled, it does belong to the dialect group in which this is in principle possible.

(89) a. t^{h}a^{33} tau^{24} ɕi^{41} i^{33}fu.
3SG PERF wash clothes
'He has washed his clothes.'
b. t^{h}a^{33} ɕi^{41} lia^{33} i^{33}fu.
3SG wash PERF clothes
'He has washed his clothes.'
c. t^{h}a^{33} tau^{24} ɕi^{21} lia^{33} i^{33}fu.
3SG PERF wash PERF clothes
'He has washed his clothes.'

On the basis of this, we conclude that in perfective sentences in Chángshā, the outer aspect position is active to the extent that it can help T to license the event argument (something which we don't see in Mandarin).

Chángshā *ta*^{21}$_{\text{PROG}}$ cannot strengthen T, presumably, following Tsai's (2008) reasoning, because it is too low in the structure. Consequently, it cannot help T to license the event argument, as a consequence of which the sentence needs to be helped in other ways. That is why *ta*^{21}$_{\text{PROG}}$ is always accompanied by other material. It is the other material that does what *ta*^{21}$_{\text{PROG}}$ is unable to do itself. We will look at these cases again, now from the perspective of Tsai's anchoring approach

One of the elements that accompanies *ta*^{21}$_{\text{PROG}}$ is *tsai*^{21}*ko*^{24}. So, how does *tsai*^{21}*ko*^{24} "save" such ungrammatical sentences with *ta*^{21}$_{\text{PROG}}$ as in (90)?

(90) t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41} *(tsai^{21}ko^{24}).
3SG watch IMP TV TSAIKO
'He is watching TV.'

We have seen earlier on that sentence final *tsai*^{21}*ko*^{24} is a tense operator setting the value of T to present: we saw that it functions like sentence final *le* in Mandarin and *lei*^{4} and *ge*^{3} in Cantonese. We take it that by overtly setting the value of T, *tsai*^{21}*ko*^{24} strengthens T in Tsai's sense to enable it to bring out the

event argument. The fact that *ta*^{21}$_{\text{PROG}}$ is too low to move up to T itself is no longer a problem: the sentence is saved by sentence final *tsai*^{21}*ko*^{24}. This way, the sentence with the progressive interpretation due to progressive marker *ta*^{21}$_{\text{PROG}}$ is grammatical.

Other cases are even more straightforwardly analyzable in the spirit of Tsai (2008). One of these cases was event modification. As I have pointed out, a sentence with *ta*^{21} modified by a manner adverb can have two readings. It can indicate that the action has been completed/terminated, but it can also indicate that the action is ongoing. Note again, that without the presence of the manner adverb, the progressive reading is not available, though this is not a problem for the perfective reading. Relevant examples are given in (91).

(91) a. t^{h}a^{33} k^{h}au^{33} ta^{21} mən^{13}.
3SG knock PERF door
'He knocked at the door.' (Only interpretation possible)
b. t^{h}a^{33} tɕ^{h}in tɕ^{h}in ti k^{h}au^{33} ta^{21} mən^{13}.
3SG lightly knock PERF/IMP door
'He knocked at the door lightly.'
'He is knocking at the door lightly.'

Under the proposed anchoring approach, the ambiguity in (90) can be accounted for. *ta*^{21}$_{\text{PERF}}$ can enable T to license the event argument; it can do so itself, it needs no other elements to help. *ta*^{21}$_{\text{PROG}}$ on the other hand cannot strengthen T and needs help which it gets from the manner adverb – and that is why the adverb is not optional. The event modifier behaves as Tsai says it does: it brings out the event argument. Note that in Tsai (2008) event modification can also be done with a temporal modifier (like 'this morning'), however this is also the case for Chángshā. In Chángshā, a sentence with *ta*^{21} and a temporal modifier can only have a perfective reading.

(92) tsan^{33}san^{33} jin^{33}t^{h}ian^{33} shan^{21}u^{21} k^{h}an^{45} ta^{21} tian^{45}s^{h}i^{41}.
today morning watch TA TV
'Tsansan watched TV this morning.'
*'Tsansan was watching TV this morning.'

In (92), the temporal phrase *jin*^{33}*t*^{h}*ian*^{33} *shan*^{21}*u*^{21} 'today' is used; *ta*^{21} in the sentence can only have perfective reading. This shows that temporal phrases in Chángshā cannot help license an event argument as they cannot so in Mandarin.

2.7.4 *ta*^{21} with the progressive aspect

In section 2.2.2.3, I showed that *ta*^{21} can always appear with the preverbal progressive marker *tsai*^{21}*ko*^{24} with the sentence having a progressive reading. In traditional analyses, in these cases, *ta*^{21} is just treated as a progressive marker without further explanation. However as we have seen, it is not clear why *ta*^{21} should be a progressive marker here, since without the combination it also can be a perfective marker. However, now we see that the fact that *ta*^{21} can be combined with the progressive aspect is also related to the licensing of an event argument.

(93) t^{h}a^{33} tsai^{21}ko^{24} k^{h}an^{45} (ta^{21}) tian^{45}si^{41}.
3SG PROG watch TA TV
'He is watching TV.'

In (93) the sentence appears in the progressive, marked by the preverbal *tsai*^{21}*ko*^{24}, and *ta*^{21} can be but not necessarily has to be combined with it. In the traditional analysis, it is not clear why these two particles can be combined. In fact, no explanation has ever been given. Under the present approach, this can be nicely accounted for because we take this instance of *ta*^{21} as a progressive marker, which in this case get assistance from the other progressive marker. In Tsai (2008), the progressive marker *zài* is located in outer aspect position, hence it can strengthen T directly, helping anchor the sentence to tense (Tsai 2008). I assume that the same is true in Chángshā, where the preverbal *tsai*^{21}*ko*^{24}, like *zài* in Mandarin, also occupies a position from which it can raise to T or in any case strengthen it directly.

2.7.5 *ta*^{21} with negation and other licensors

We have seen that *ta*^{21} in combination with a negation can only be *ta*$^{21}{}_{\text{PROG}}$, as in (3), repeated here as (94).

(94) a. t^{h}a^{33} au^{21} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG NEG watch PROG TV
'He is not watching TV.'
b. t^{h}a^{33} k^{h}an^{45} ta^{21} tiən^{45}si^{41}.
3SG watch PERF TV
'He watched TV.'

ta^{21} in (94a) can only have a progressive reading, while in (94b), without the negative marker, the progressive reading is not available. As we noted, if *ta*^{21} is exclusively treated as a perfective marker, the interpretation of (94a) is not easy to explain: it is not clear why in a negative construction the perfective marker must produce the progressive meaning (and in the greater context of Chinese linguistics it is not clear why the perfective marker would still be there at all, since it is generally in complementary distribution with the negative marker). Now that we have distinguished *ta*$^{21}{}_{\text{PROG}}$ from *ta*$^{21}{}_{\text{PERF}}$, the observation in (94a) can be nicely accounted for. That is, in (94a), *ta*^{21} is used as a progressive marker. The negative marker *mau*^{21} 'not have' can license the event argument (Tsai 2008:681). Other mechanisms (like event coordination, event subordination counterfactuals) mentioned by Tsai also work with the use of *ta*$^{21}{}_{\text{PROG}}$ in Chángshā.

(95) a. tsan^{33}san^{33} i^{13} pian^{33} k^{h}an^{45} ta^{21} tiən^{45}shi^{41},
on the one hand watch PROG TV
i^{13} pian^{33} ɕiə^{41} ta^{21} pao^{45}kao^{45}.
on the other hand write PROG report
'Tsansan is watching TV and writing the report at the same time.'
b. tsan^{33}san^{33} tɕ^{h}i^{13} ta^{21} ma^{41} shan^{21}shan^{33}.
ride PROG horse climb mountain
'Tsansan is climbing the mountain riding on a horseback.'

c. tsan^{33}san^{33} k^{h}an^{45} ta^{21} tian^{45}si^{41}, ta^{33} ti tɕ^{h}i^{33}tsi k^{h}an^{45}
watch PROG TV 3SG SUB wife read
ta^{21} pau^{45} tsi^{41}.
PROG newspaper
'Tsansan is watching TV, his wife is reading a piece of newspaper.'

d. xao^{21}shen^{33} t^{h}i^{45} ta^{21}!
carefully listen PROG
'Listen carefully!'

(95a) is a case of event coordination, (95b) of event subordination, (95c) of conjunction and (95d) is an imperative. In all the sentences in (95), *ta*^{21} can be interpreted as a progressive marker, just as predicted by Tsai (2008) in combination with our claim that *ta*^{21} is a progressive marker positioned too low in the structure to be able to help T to license the event argument.

To sum up, above I first pointed out that it is better to take the two particles approach to explain the multifunction of *ta*^{21}. I pointed out that the two particles approach can avoid problems associated with the one particle approach. Then I provided three pieces of evidence to argue that there are two *ta*^{21}s: one is a perfective marker, the other a progressive marker. Having argued for the existence of two particles, I further provided an analysis to distinguish the two. I argued that the two particles are different in syntactic position. Though both *ta*$^{21}{}_{\text{PERF}}$ and *ta*$^{21}{}_{\text{PROG}}$ are located in inner aspect, *ta*$^{21}{}_{\text{PROG}}$ is lower than *ta*$^{21}{}_{\text{PERF}}$. Since in the course of derivation, *ta*$^{21}{}_{\text{PERF}}$ can link up to TP, through the process of which the event argument is brought out, while this is impossible for *ta*$^{21}{}_{\text{PROG}}$. As a result, when *ta*$^{21}{}_{\text{PROG}}$ is used the sentence always needs other elements to strengthen T so that it can license ("bring out") the event variable. These elements include event modification, event coordination, event subordination, negation, sentence final elements relevant to tense etc.

2.8 Summary of chapter 2

In this chapter, I provide an analysis of the interpretation and distribution of *ta*^{21}. I first evaluate a possible analysis which is found in the literature: the single *ta*^{21} approach. Theoretically, one could treat *ta*^{21} as a perfective marker

with other readings derived from it depending on the linguistic context. Yet I point out that this is not satisfactory. The main reason is that I cannot provide an account for the fact that *ta*^{21} can sometimes have two interpretations in the same context.

I then provide a new proposal: there are two particles: *ta*$^{21}_{\text{PERF}}$ and *ta*$^{21}_{\text{PROG}}$, the former is a perfective and the latter is a progressive marker. To support my analysis, I provide three pieces of evidence: i) *ta*^{21} can have two interpretations when an event is modified by certain verbal adverbials; ii) in negative constructions, *ta*^{21} can only be interpreted as a progressive marker; iii) when sentence final *tsai*^{21}*ko*^{24} (which I argue to be a tense operator) is used, *ta*^{21} can indicate the ongoingness of an event in an activity.

I continue to provide an analysis to disambiguate *ta*$^{21}_{\text{PERF}}$ and *ta*$^{21}_{\text{PROG}}$ by pointing out that the difference between *ta*$^{21}_{\text{PERF}}$ and *ta*$^{21}_{\text{PROG}}$ lies in the fact that *ta*$^{21}_{\text{PERF}}$ is syntactically higher than *ta*$^{21}_{\text{PROG}}$. *ta*$^{21}_{\text{PERF}}$ is inner aspect but interpreted in outer aspect; *ta*$^{21}_{\text{PROG}}$ is also located in inner aspect position, lower than *ta*$^{21}_{\text{PERF}}$ (I adopted Sybesma's 2017 structure that involves three layers in Inner aspect). In my analysis, I follow Tsai (2008), in assuming that i) an event variable needs to be syntactically licensed; ii) syntactic tense anchoring is a way of licensing the event variable; in English, tense being overt, T is strong enough to license the event variable, while in Mandarin, it is too weak to do so. To be an effective licensor, T needs to be supported one way or another.

In the spirit of Tsai's work, I propose that *ta*$^{21}_{\text{PERF}}$ is syntactically higher than *ta*$^{21}_{\text{PROG}}$, and that it, though not physically in outer aspect itself, is in a relation with outer aspect such that it can strengthen T so that the latter can license the event variable. This explains why *ta*$^{21}_{\text{PERF}}$ can stand alone in the sense that it need not be accompanied by other material. This is different for *ta*$^{21}_{\text{PROG}}$. I propose that ta$^{21}_{\text{PROG}}$ is located lower than ta$^{21}_{\text{PERF}}$. Since it is too far away from outer aspect, blocked by the perfective aspect, it cannot strengthen T. Note that even if the head position of the highest AspP in inner aspect is not filled, the position/projection is still there.To salvage the sentence, other elements need to be present to help T to do its licensing job. That explains why *ta*$^{21}_{\text{PROG}}$ is always accompanied by other material, unlike *ta*$^{21}_{\text{PERF}}$.

To strengthen the analysis presented in this chapter that there are two particles in Chángshā, in chapter 4, I analyze the particles *le* and *zhe* in Mandarin and one particle *tao*^{21} in Xùpǔ. I point out that *ta*$^{21}{}_{\text{PERF}}$ and *ta*$^{21}{}_{\text{PROG}}$ particles in Chángshā correspond to *le* and *zhe* in Mandarin and *tao*$^{21}{}_{\text{PERF}}$ and *tao*$^{21}{}_{\text{PROG}}$ in Xùpǔ. But before that, I provide an analysis of another Chángshā particle, *ka*^{41} in chapter 3.