

# Tense and mood marking in Xining Mandarin

## An aspectual account of the particle *lia*

Daniel Bell

Newcastle University

This study presents a corpus-based analysis of the sentential particle *lia* 咧 in Xining Mandarin (Qinghai province, northwest China), which functions both as a future tense marker and as an atemporal marker of affirmative mood. Applying the notion of “aspectually sensitive tenses” (de Swart, 1998), the distribution of *lia* is explained in terms of the selectional restrictions that *lia* places upon the aspectual class of its complement. In particular, it is argued that *lia* functions as a future tense marker with dynamic situations, but as a marker of affirmative mood with stative situations.

**Keywords:** Xining Mandarin, future tense, aspectual selection, mood marking, sentential particle

### 1. Introduction

The distinctiveness of Xining Mandarin in comparison to Standard Mandarin can be seen in the availability of head-final morphosyntax, where this either does not exist in Standard Mandarin (e.g., in the case of auxiliary verbs), or where it must be licensed by a contrastive or focus interpretation, as in the case of SOV word order (Ernst & Wang, 1995; Huang, Li, & Li, 2009; Shyu, 1995). Because of heavy structural interference from the Mongolic and Bodic languages in the region, Xining Mandarin exhibits SOV as a basic word order (c.f. Cheng, 1980; Jia, 1990; Yang, 2009) and allows modal auxiliaries to follow their complement. These head-final orders are illustrated in (1):

- (1) 你外国人的情绪哈照顾着的要咧  
 $\eta i^{44}$  [[[ $ue^{213}kuu^{55}$   $z\ddot{a}^{24}$   $tsr^z$   $t\check{c}^{h,42}su^{21}$   $xa$ ]  $t\check{s}\check{o}^{44}ky_{VP}$ ]  $t\check{s}\check{o}$   $tsr^z$   $i\check{o}^{44}$ ] *lia*  
2SG foreigner NMLZ emotions OBJ look.after IPFV NMLZ need *lia*  
‘You need to look after the feelings of foreigners.’

With regard to negation and manner adverbs, Xining Mandarin patterns with SOV languages in exhibiting the order S-O-Adv-Neg-V (S. Wang & Dede, 2016):

- (2) 张明教室里书好好儿不看  
 tʂɿ̃<sup>21</sup> mĩ<sup>24</sup> tciɔ<sup>13</sup> ʂĩ<sup>53</sup> | fɿ̃<sup>44</sup> xɿ̃<sup>53</sup> xɿ̃<sup>13</sup> ε pɿ̃<sup>21</sup> k<sup>h</sup> ā<sup>13</sup>  
 PN classroom in book properly not read  
 ‘Zhang Ming doesn’t study properly in the classroom.’

(S. Wang & Dede, 2016: 419)

Meanwhile, in the nominal domain, several postpositions are found, such as the object marker *xa* 哈 in (1).<sup>1</sup> The purpose of this paper is to account for the distribution of the particle *lia* 俩, which occurs in the right clausal periphery and marks affirmative mood, as in (1), as well as future tense.<sup>2</sup>

## 2. Previous studies on *lia* in the Xining dialect

Both future tense and modal functions of the particle *lia* are reported in existing studies, but little attempt has been made to explain the puzzle of why *lia* sometimes obligatorily derives a future reading and yet elsewhere imposes no future time restriction. With regard to the future usage, Cheng (1980: 149) mentioned that *lia* (in his transcription: *lie*) *biǎoshì dòngzuò jíjiāng fāshēng* 表示动作即将发生 (‘expresses that an event is about to occur’). The future marking usage has since been observed by others such as S. Wang (2009: 129), who illustrates as follows, where the event of the flower blooming follows the utterance time (cf. Du, 1995; Ma, 2009; Ren, 2004):<sup>3</sup>

- (3) 花儿开俩。  
 flower open *lia*  
 ‘The flower will bloom.’  
 (S. Wang, 2009: 129)

1. Nevertheless, head-initial orders are also found in real language use, largely due to the recent influence of Standard Mandarin (*Putonghua*) upon the dialect. One example of the pressure from Standard Mandarin is the gradual loss of an ablative postposition in favor of Standard Mandarin prepositional marking (Dede, 1999).

2. It should be noted that an instrumental/comitative postposition with the same phonological form, *lia*, exists in the Xining dialect. This device has been suggested to be grammaticalized from the numeral *lia* ‘two’ (Dwyer, 1992), or else to be a borrowing of a Monguor postposition (Du, 1995). It is a different morpheme from the sentential particle and is not relevant to the discussion in this paper, where ‘*lia*’ refers only to the sentential particle.

3. The source articles for Examples (3) and (4) did not provide a phonetic transcription.

In terms of mood, the semantic contribution of *lia* has been described variously as *kěndìng* 肯定 ‘affirmative’ (e.g., Ren, 2004; A. Zhang, 2007: 343–344), as providing an ‘affirming tone’ (Zhu et al. 1997: 437, note 15), *chénsù yǔqì* 陈述语气 ‘declarative mood’, *gǎntànyǔ qì* 感叹语气 ‘exclamative mood’ (M. Zhang & Wang, 2012: 187), or as indicative mood with strong subjective speaker attitude (Du, 1995: 58). (4) illustrates examples of this kind:

(4) 我回民就是俩

1SG Hui.people really be *lia*

‘I am a Hui.’

(A. Zhang, 2007: 351, ex. (50))

With regard to how the modal and future function relate to each other, according to Du (1995: 58) – who has conducted the most detailed study on *lia* to date – *lia* simultaneously fulfils the dual function of marking mood and future tense in both declarative and interrogative contexts, although in the latter case the modal contribution is interrogative mood rather than subjective speaker attitude. Meanwhile, in terms of temporality, Du (1995) claims that clauses marked by *lia* can only have future time reference; the only exception mentioned is aspectually frequentive predicates, which denote the repeated occurrence of events (without the attainment of an endpoint) (see Section 6.1.6).

But Du’s (1995) characterization ignores many other types of declarative clause identified in this study where *lia* is non-future denoting, as well as simple statives like the copula construction in (4) above. Du (1995) claims that a two-way partition exists: *lia* can be a mood marker (non-future denoting) conveying speaker attitude, or can denote mood *and* future tense. However, below data will be presented showing that future *lia* can also be purely future-denoting. More generally, as noted above, it remains unexplained why in some predicates (e.g., (3)) *lia* functions to obligatorily denote future time reference but elsewhere the future function is absent and only mood is denoted. In this study I show that with regard to its temporality, *lia* is an aspectually sensitive tense in the sense of de Swart (1998), and that the future tense function of *lia* is present precisely on those predicates which are dynamic, and not on those that are stative.

Previous treatments of sentential *lia* have considered only a limited subset of the possible contexts in which this particle can be used, and so this paper integrates a much larger array of different uses of *lia* found in corpus data into a single unified analysis. Before proceeding, a clarification is necessary concerning the phonological form of *lia*. It is usually realized in the corpus data as *lia*, but in a minority of cases as 哩, suggesting that *lia* may have been derived by a fusion

of 哩 and the sentence-final particle *a/ya* 啊/呀 (cf. Z. Wang, 1983; Zhao 2015).<sup>4</sup> For convenience, in this paper *lia* is used to refer to both phonological forms, since this was by far the most frequent realization in the corpus data.

The forthcoming sections are organized as follows. Next, the theory of tense and aspect employed is introduced (Section 3). Then predictions are formulated to capture the distribution of *lia* (Section 4), followed by discussion of its use for future marking (Section 5) and affirmative mood marking (Section 6). Section 7 considers but does not accept an alternative analysis of *lia* as an irrealis mood marker, and then Section 8 concludes.

### 3. Theoretical background

Tense, the “grammaticalized expression of location in time” (Comrie, 1985: 9), “relates the time of the situation referred to to some other time” (Comrie, 1976: 1–2). The discussion in this paper uses terminology from Klein’s (1994) theory of tense, which builds on Reichenbach (1947). Klein (1994: 119) posits the following time spans/points (TU is taken to be a timepoint):

- Utterance time (TU)*: The time the sentence is uttered.  
*Topic time (TT)*: The time to which the speaker’s claim is confined.  
*Situation time (TSit)*: The time of the event denoted by the predicate of the sentence.

In Klein’s framework, temporal and aspectual distinctions are expressed by ordering relations of precedence, inclusion and subsequence for TU, TT and TSit. Tense is the relation between the topic time (TT) and utterance time (TU), whilst aspect is the relation between TT and situation time (TSit). Topic time (TT) can be specified by the discourse and maintained anaphorically (e.g., in answer to a question about a particular time frame), or it can be indicated by temporal adverbials in the sentence itself.

Future tense indicates that TT is ordered after TU ( $TU < TT$ ): the speaker’s claim is restricted to the period TT which follows the speech time. The typical

4. Merging of co-occurring sentence-final particles has been observed across Chinese dialects, for example for Mandarin *la* 啦 (from *le* 了 + *a* 啊; Li and Thompson, 1981: 317). A merger of 哩 + *a/ya* 啊/呀 in Xining Mandarin is suggested by evidence of this process from elsewhere among Qinghai Mandarin dialects. Whilst in the Xining dialect *lia* predominates and *li* is rare (i.e. the assumed merge is already at an advanced stage), in the Gangou dialect (Minhe county) an earlier stage of the merge can be observed, with *li* more commonly occurring alone (as well as frequently preceding *a*), and the merged variant *lia* existent but not yet typical; see Zhao, 2015: 67 for discussion).

simple future tense, as defined by Klein (1994: 114), is represented below, in which the TU is in the pre-time (i.e., prior to TT), and the “topic time [denoted by square brackets] is after the time of utterance and the time of the situation [denoted by curly brackets] itself includes the topic time”:

$$\begin{array}{ccccccc} \text{TU} & \text{-----} & \text{[-----]} & \text{-----} & & & \\ \text{pretime} & & \{ \text{TSit} \} & \text{posttime} & & & \text{(Klein, 1994: 114)} \end{array}$$

Meanwhile, relative future tense is defined here as specifying that TSit follows TT, thus taking TT as the reference time instead of the time of utterance (Klein 1994: 133).

Cross-linguistically, tense markers have been found to be subject to selectional restrictions concerning the aspectual class of the predicates which they select as their complements. de Swart (1998) proposed that the past tenses in French are aspectually sensitive, with the *Passé Simple* and *Imparfait* selecting events and states respectively. Similarly, Schmitt (2001) argued that the present tense in Portuguese and English selects states as its complement. Likewise, aspectual restrictions have been identified in Standard Mandarin for temporal reference: Lin (2002) demonstrates that bare homogeneous sentences (see below) obligatorily have present time reference, whereas bare heterogeneous (non-homogeneous) sentences are obligatorily past. These accounts rely on de Swart’s (1998) model, which will be employed in the present study.

de Swart’s (1998) model incorporates three eventuality types – states, processes and events – under the supercategory distinctions homogeneous vs. quantized and stative vs. dynamic:

HOMOGENEOUS		QUANTIZED
state	process	event
STATIVE	DYNAMIC	

(de Swart, 1998: 351)

The terms “quantized” and “homogeneous” refer to mereological structure (the relation of parts to the whole). As de Swart (1998: 351) explains, states and processes are homogeneous, meaning that they have divisive reference (“parts of being sick qualify as being sick”) and cumulative reference (“writing plus writing is writing”). By contrast, events are quantized, having non-divisive and non-cumulative reference (e.g. parts of the event *run a mile* do not qualify as the whole, and addition of the whole results in multiples i.e. *run a mile plus run a mile ≠ run a mile*) (Ibid.).

The model is compositional in that the basic aspectual class of the verbal predicate can be subsequently altered (mapped between eventuality types) by aspectual operators, which can apply recursively (as represented by the kleene star):

[Tense[Aspect\*[Eventuality description]]]

(de Swart, 1998: 348)

Aspectual operators can be grammatical aspect markers or adverbials. For example, habitual adverbials and progressive aspect map events or processes to states (de Swart, 1998: 382–383; see also Dowty, 1986; Kamp & Reyle, 1993; Parsons, 1990). However, in the absence of overt grammatical or lexical aspectual operators, contextual reinterpretation (involving linguistic or real world context) can also alter the aspectual class of eventuality descriptions (e.g., in *Suddenly, I knew the answer*, a stative is interpreted as an event), and so de Swart's model also includes coercion operators which perform covert mappings between the three eventuality types (state, event and process). In this framework, tense operators do not themselves alter the aspectual class of the situation with which they occur, but their input requirements must be satisfied in order for their use to be grammatical.

#### 4. Aspectual selection by *lia*

With regard to the predictions for *lia* usage, the present study claims that future *lia* selects dynamic situations as its complement, and that atemporal modal *lia* selects stative situations as its complement, where dynamic and stative are defined as in de Swart's (1998) framework introduced above.

(5) Future tense marker *lia* selects dynamic situations as its complement.

(6) Affirmative mood marker *lia* selects stative situations as its complement.

Although the types of sentences with which *lia* occurs will be seen to be quite diverse, it will be argued that these aspectual restrictions account for the distribution of the future and modal functions of *lia* in the corpus data and determine when it is a future marker and when it is an atemporal mood marker.

To briefly illustrate how these predictions work, in (7), through the addition of a habitual frequency adverbial, an eventive predicate is mapped to a state which possesses the subinterval property and has non-count, cumulative reference:

(7) 他每个星期西宁去俩

*tɕia*<sup>24</sup> *mi*<sup>55</sup> *kɔ*<sup>21</sup> *ɕi*<sup>z55</sup>*ts*<sup>h</sup>*ɿ*<sup>z21</sup> *sɿ*<sup>z44</sup>*ŋi*<sup>ɿ</sup><sup>z21</sup> *ts*<sup>h</sup>*ɿ*<sup>z13</sup> *lia*

3SG every CL week Xining go *lia*

'He goes to Xining every week.'

≠ 'He will go to Xining every week.'

[Elicited]

Because this aspectual shift results in the complement of *lia* being stative, (5)–(6) correctly predict the fact that *lia* does not derive future time reference in habitual predicates.

## 5. Future marking with *lia*

As an aspectually sensitive future tense marker defined as in (5), in dynamic sentences, *lia* is incompatible with past time adverbs, which order the TT prior to TU (TT < TU) (the only exceptions, when *lia* does not denote absolute future tense, are if the context allows *lia* to denote relative future tense (discussed below in this section) or if coercion applies so that the predicate is no longer dynamic (see Section 6.1.3–6.1.4). By default, however, *lia* functions as an absolute future marker which orders TT *after* the time of utterance (TU < TT).

Examples of activity, accomplishment, and achievement predicate types are presented in this section (statives are discussed in Section 5.1.3 and Section 6.1.1 below). It can also be seen from these aspectually dynamic sentences that, as noted by Du (1995: 58), *lia* is in complementary distribution with the perfective marker *liǎo* 了, which like *le* 了 in Standard Mandarin is associated with past time reference (cf. Wu, 2004). Consider the activity verb *ciá*<sup>42</sup>*y*<sup>55</sup> 下雨 ‘rain’. With the past time adverb *i*<sup>213</sup>*le*<sup>24</sup> 夜来 ‘yesterday’, *lia* cannot be used, but with a future time adverb it can be used:

- (8) 夜来下雨了/\*俩  
*i*<sup>213</sup>*le*<sup>24</sup> *ciá*<sup>42</sup>*y*<sup>55</sup> *liǎo* /\**lia*  
 yesterday fall.rain PFV /*lia*  
 ‘Yesterday it rained.’ [Elicited]
- (9) 明朝下雨俩/\*了  
*miǎ*<sup>24</sup>*tsǝ*<sup>55</sup> *ciá*<sup>42</sup>*y*<sup>55</sup> *lia* /\**liǎo*  
 tomorrow fall.rain *lia* /PFV  
 ‘Tomorrow it will rain.’ [Elicited]

Similarly, *lia* can occur in the accomplishment predicate ‘write a hundred characters’ with the future time adverb *miǎ*<sup>24</sup>*tsu*<sup>55</sup> 明早 ‘tomorrow’ but not the past time adverb *i*<sup>213</sup>*le*<sup>24</sup> 夜来 ‘yesterday’:

- (10) 夜来傢一百字写了/\*俩  
*i*<sup>213</sup>*le*<sup>24</sup> *tciá*<sup>24</sup> *r*<sup>44</sup>*pi*<sup>55</sup> *tsɿ*<sup>213</sup> *ci*<sup>55</sup> *liǎo* /\**lia*  
 yesterday 3SG one.hundred character write PFV /*lia*  
 ‘Yesterday he wrote a hundred characters.’ [Elicited]
- (11) 明朝傢一百字写俩/\*了  
*miǎ*<sup>24</sup>*tsǝ*<sup>55</sup> *tciá*<sup>24</sup> *r*<sup>44</sup>*pi*<sup>55</sup> *tsɿ*<sup>213</sup> *ci*<sup>55</sup> *lia* /\**liǎo*  
 tomorrow 3SG one.hundred characters write *lia* /PFV  
 ‘Tomorrow he will write a hundred characters.’ [Elicited]

The same holds with the achievement verbs *sɿ*<sup>55</sup> 死 ‘die’ and *le*<sup>24</sup> 来 ‘come’:

- (12) 夜来小张死了/\*俩  
*i<sup>z213</sup>lɛ<sup>24</sup> ciɔ<sup>44</sup> tɕɔ<sup>44</sup> sɿ<sup>z55</sup> liɔ /\*lia*  
 yesterday NAME die PFV /lia  
 ‘Yesterday Xiao Zhang died.’ [Elicited]
- (13) 明朝小张死俩/\*了  
*miã<sup>24</sup>tsɔ<sup>55</sup> ciɔ<sup>44</sup> tɕɔ<sup>44</sup> sɿ<sup>z55</sup> lia /\*liɔ*  
 tomorrow NAME die lia /PFV  
 ‘Tomorrow Xiao Zhang will die.’ [Elicited]
- (14) 傢夜来来了/\*俩  
*tciã<sup>24</sup> i<sup>z213</sup>lɛ<sup>24</sup> lɛ<sup>24</sup> liɔ /\*lia*  
 3SG yesterday come PFV /lia  
 ‘Yesterday he came.’ [Elicited]
- (15) 傢明朝来俩/\*了  
*tciã<sup>24</sup> miã<sup>24</sup>tsɔ<sup>55</sup> lɛ<sup>24</sup> lia /\*liɔ*  
 3SG tomorrow come lia /PFV  
 ‘Tomorrow he will come.’ [Elicited]

The fact that past-time adverbs cannot cancel the future tense reading supplied by *lia* indicates that futurity is an inherent component of the meaning of *lia*, rather than only a conversational implicature. This is a basic test for the future semantics of *lia*, but it was not applied in the previous studies. It is important to note too that if no future-denoting adverb is present in dynamic sentences, an absolute future tense reading is still derived (unless, as noted above, a relative future reading is possible in context or if coercion alters the aspectual class of the predicate so that it is no longer dynamic). Even though future-denoting adverbs commonly co-occur with *lia* in dynamic predicates, many examples without adverbs were also found in the corpus data discussed below (see Section 5.1.1–5.1.2)

*Lia* is also used to mark future in dynamic conditional sentences. In predicative statements (‘if X happens (in the future), then Y will happen’), *lia* can be used in both the condition and the consequence clause (as in (16)), or just in the main clause (as in (17)).

- (16) 你堂会那么冷的地方去俩说哈，你实话感冒哈俩  
*ŋi<sup>i53</sup> t<sup>h</sup>ã<sup>213</sup>xui<sup>44</sup> nɛ<sup>53</sup>mə lã<sup>55</sup> tsɿ<sup>z</sup> tsɿ<sup>z21</sup>fã<sup>24</sup> tɕ<sup>h</sup>ɿ<sup>z13</sup> lia fɔ-xa, ŋi<sup>i53</sup>*  
 2SG COND that cold NMLZ place go lia say-COND 2SG  
*ɕɿ<sup>21</sup>xua<sup>24</sup> kã<sup>55</sup>mɔ<sup>213</sup>-xa lia*  
 truth catch.cold-COMPL lia  
 ‘If you go to such a cold place, you will certainly get a cold.’ [Elicited]



- (17) 快点吃啊，不是哈没有掉俩  
*k<sup>h</sup>ue<sup>21</sup> tiã<sup>55</sup> t<sup>s</sup>h<sup>z</sup>44 a pɣ<sup>21</sup> sɿ<sup>z13</sup> xa mɔ<sup>21</sup> iu<sup>13</sup> tiɔ<sup>55</sup> lia*  
 fast little eat PRT NEG be COND NEG have COMPL *lia*  
 ‘Eat a bit faster! Otherwise there will be nothing (left)’

In each scenario, TT for both clauses is understood to be after TU. That is, if *lia* only occurs on the main clause (and temporal adverbs are absent in the dependent clause), then the temporal reference of the dependent clause is derived from the main clause, and *lia* marking on the main clause means that TT denoted by the dependent clause is also obligatorily post-TU.

With regard to the futurity requirement, *pace* Cheng (1980: 149) (cited in Section 2, above) there is not an imminency restriction on *lia*. This can be seen in that *lia* can mark dynamic events located in the more distant future (‘the year after next’), even where these are portrayed as non-imminent by the use of *ts<sup>h</sup>ε<sup>24</sup>* 才 ‘not until’:<sup>5</sup>

- (18) 傢后年才去俩  
*tɕia<sup>24</sup> xu<sup>21</sup> niã<sup>24</sup> ts<sup>h</sup>ε<sup>24</sup> ts<sup>h</sup>ɿ<sup>z13</sup> lia*  
 3SG after.year not.until go *lia*  
 ‘Not until the year after next will he go.’ [Elicited]

Finally, the fact that *lia* can denote *relative* future tense has been overlooked in the literature on the Xining dialect (though Zhao, 2015 mentions this use for the Gangou dialect). “Relative future tense” takes a contextually-determined time other than the utterance time as its reference point, and so in complex sentences containing dynamic predicates *lia* can express the “future in the past” (see Comrie, 1985: 74–5):

- (19) 夜来我西宁去了(\*俩)哈，我我的朋友哈见哈俩  
*i<sup>z213</sup>ε<sup>24</sup> nɔ<sup>44</sup> sɿ<sup>z44</sup>ŋiã<sup>21</sup> ts<sup>h</sup>ɿ<sup>z13</sup> liɔ (\*lia) xa nɔ<sup>44</sup> nɔ<sup>44</sup>-tsɿ<sup>z</sup> p<sup>h</sup>ε<sup>21</sup>iu<sup>13</sup>*  
 yesterday 1SG Xining go PFV (\*lia) COND 1SG 1SG-POSS friend  
*xa tɕiã<sup>213</sup>-xa lia*  
 OBJ see-COMPL *lia*  
 ‘If I had gone to Xining yesterday, (I) would have seen my friend.’ [Elicited]

This is a counterfactual past conditional, which involves an event that did not happen, but the speaker hypothesizes about what the consequences might have been if the event had taken place. Future markers can be found in counterfactuals cross-linguistically, for example in Zulu (Halpert, 2010), and also in Standard Mandarin where the modal *hui* 会 can be used (Su, 2008). In Xining Mandarin, *lia* marks the unrealized consequence clause, and cannot occur on the counterfactual past

5. Thanks to Boping Yuan for suggesting the use of *ts<sup>h</sup>ε<sup>24</sup>* 才 as a diagnostic.

clause in place of the perfective marker. This type of usage is consistent with an analysis of *lia* as marking relative future tense because the event of the main clause (TSit) occurs after the event of the conditional clause (TT) and so TSit is future with regard to TT (in this example, seeing the friend follows going to Xining). In the next section, future marking with *lia* will be illustrated more fully from the corpus data.

### 5.1 Aspectual selection by future *lia*

The hypotheses in (5) and (6) were tested against a corpus of free speech data (approx. 20 hours in length) from speakers of Xining Mandarin, a dialect named after the capital city of Qinghai province, but spoken in a number of counties around the city itself, including Haiyan and Menyuan, from which the speakers in the present study originated (see Bell, 2017; C. Zhang, 1984).<sup>6</sup> All examples in this paper come from this corpus data, except where otherwise noted, and elicited examples are from informants from these same counties.

Future marking with *lia* was considered in relation to predicate aspect, utilizing Vendler's (1967) classification. Vendler (1967) classified verbs into states, activities, accomplishments and achievements, according to their telicity/atelicity, whether they denote a point-in-time or a duration (i.e., are punctual/durative) and whether they are dynamic or stative (i.e., whether or not they involve change). The four verb types can be summarized as follows:

**Table 1.** Vendler's four verb classes (reproduced from Chen & Shirai, 2010: 2)

<i>Class</i>	<i>[±Dynamic]</i>	<i>[±Telic]</i>	<i>[±Punctual]</i>	<i>Examples</i>
<i>State</i>	–	–	–	Know, love
<i>Activity</i>	+	–	–	Run, walk, swim
<i>Accomplishment</i>	+	+	–	Run a mile, paint a picture
<i>Achievement</i>	+	+	+	Recognize, find, spot, reach

According to the selectional restrictions given in (5) and (6) above, it is predicted that *lia* will be future-denoting with activity, accomplishment and

6. About half an hour of this speech data came from a picture narrative task (San Roque et al., 2012); the remainder consisted of conversations about everyday topics. Personal names have been changed for anonymity. With regard to the phonetic transcriptions, in view of minor differences in pronunciation between Xining dialect speakers from Haiyan and Menyuan counties, it is worth noting that Menyuan speakers' pronunciation is reflected in the following examples: (16), (20), (22), (26), (28), (32), (36), (42), (48), (50), (51), (56), (57), (59), (63), (64) (the remainder reflect Haiyan speakers' pronunciation).

achievement verbs, because they are aspectually dynamic in Vendler's system (as for de Swart, 1998).

To determine the aspectual class of the verbal predicates with which *lia* occurred, the predicates were examined in context in order to understand the meaning of the utterance, and the operational tests from Chen and Shirai (2010) were applied (see the appendix). As shown in Table 2 below, future denoting tokens of *lia* occurred primarily on achievement predicates, and to a lesser extent also on activity predicates. Stative predicates marked by *lia* rarely had future time reference (the reason why future reference arose here is discussed below), whilst *lia* occurred once on an accomplishment predicate (see below). Overall, 119/317 tokens of *lia* in the corpus data occurred in future-denoting predicates.

Table 2. *Lia*-marked predicates with future time reference.

<i>Lexical aspect</i>	<i>No. of Tokens</i>
<i>ACH</i>	76
<i>ACC</i>	1
<i>ACT</i>	32
<i>STA</i>	10
<i>Total</i>	119

The examples with which *lia* marked future tense will now be examined to demonstrate that they are aspectually dynamic, satisfying (5).

### 5.1.1 *Achievement and accomplishment predicates*

Achievement verbs were the verb class with which *lia* was most frequently a future marker (76/119 tokens), and these uses were comprised mainly of motion verbs (e.g.,  $t\zeta^{h_1\gamma^{z13}}$  去 'go',  $xuei^{42}le^{24}$  回来 'come back',  $l_3^{24}$  来 'come',  $xa^{42}t\zeta^{h_1\gamma^{44}}$  下车 'get out of the car',  $\zeta^{531}le^{24}$  上来 'come up') and resultative verb compounds more generally (e.g.,  $x\gamma^{44}-t\gamma^{55}$  好到 'become well',  $m\gamma^{44}-xa^{55}$  摸哈 'grasp',  $p\bar{a}^{31}-t\gamma^{55}$  绊倒 'fall over').<sup>7</sup> (20)–(23) illustrate:

- (20) 然后五月份呵可上海去俩  
 $r\bar{a}^{35}xuu^{55} \gamma^{44}yu^{53}f\bar{o}$   $x\gamma$   $k^{h_1\gamma^{213}}$   $\zeta\bar{a}^{31}xe^{53}$   $t\zeta^{h_1\gamma^{z13}}$  *lia*  
 then May TOP again Shanghai go *lia*  
 'Then in May (I) will go to Shanghai again.'

7. An anonymous reviewer wondered whether *qu* 去 'go' in Chinese was really an achievement verb. Here it is classified as an achievement according to the tests in the appendix from Chen and Shirai (2010), and following Tong and Shirai (2016).

- (21) 再就这个娃娃们倒了哈绊倒俩  
*tsai<sup>12</sup> tɕiu<sup>213</sup> tʂɿ<sup>44</sup> kɔ<sup>24</sup> ua<sup>21</sup>ua<sup>24</sup>-mō ka<sup>42</sup> liɔ xa pã<sup>31</sup>-tɔ<sup>55</sup> lia*  
 ADV just this CL child-PL little PRT PRT fall-arrive *lia*  
 ‘Also, children are small, (they) will fall over.’
- (22) 回来的路上，我说我这扎下车俩  
*xuei<sup>42</sup>lɛ<sup>24</sup> tʂɿ<sup>z</sup> lu<sup>42</sup>ʂã<sup>55</sup>, nɔ<sup>53</sup> fɔ<sup>44</sup> nɔ<sup>53</sup> tʂɿ<sup>44</sup> tʂa<sup>42</sup> xa<sup>42</sup>tʂ<sup>h</sup>ɿ<sup>44</sup> lia*  
 return NMLZ road-on, 1SG say 1SG this place down.car *lia*  
 ‘On the way home, I said, “I will get off here.”’
- (23) 你哈疯哈给俩  
*ŋi<sup>44</sup> xa fã<sup>44</sup>-xaɿ<sup>53</sup>-ki lia*  
 3SG OBJ crazy-COMPL-CAUS *lia*  
 ‘You will be driven crazy.’

Accomplishment predicates are also straightforwardly dynamic. Consider the accomplishment predicates *tʂ<sup>h</sup>ɿ<sup>z44</sup>-pɔ<sup>213</sup>* 吃饱 ‘eat until full’ and *tsu<sup>24</sup>-ʂɔ<sup>53</sup>* 做上 ‘do’-COMPL.

- (24) 我也做个俩  
*nɔ<sup>44</sup> i<sup>z44</sup> tsu<sup>24</sup>-ʂɔ<sup>53</sup> kɔ<sup>21</sup> lia*  
 1SG also do-COMPL CL *lia*  
 ‘I will also do (and finish) one.’
- (25) 小张吃饱俩  
*ciɔ<sup>44</sup> tʂɔ<sup>44</sup> tʂ<sup>h</sup>ɿ<sup>z44</sup>-pɔ<sup>213</sup> lia*  
 NAME eat-full *lia*  
 ‘Xiao Zhang will eat until full.’

[Elicited]

In the corpus data only 1 token of *lia* on an accomplishment verb occurred (*tsu<sup>24</sup>-ʂɔ<sup>53</sup>* do-COMPL); accomplishments in Mandarin are often formed from resultative verb compounds (though not exclusively, as quantized objects can also derive accomplishment vps e.g. *chī yì wǎn mǐfàn* 吃一碗米饭 ‘eat a bowl of rice’). But the resultative verb compounds with which *lia* occurred profiled the result (as in *pã<sup>31</sup>-tɔ<sup>55</sup>* ‘fall over’) rather than the process (except in the case of *tsu<sup>24</sup>-ʂɔ<sup>53</sup>*), and so fall under the achievement type according to the diagnostic tests applied (see the appendix).

### 5.1.2 Activity predicates

*Lia* occurred on a range of activity verbs such as *tʂ<sup>h</sup>ɿ<sup>44</sup>* 吃 ‘eat’, *tsu<sup>55</sup>* 走 ‘walk/go’, *k<sup>h</sup>ɿ<sup>44</sup>* 哭 ‘cry’, *kã<sup>55</sup>* 干 ‘do’, *tsu<sup>24</sup>* 做 ‘do’, *xã<sup>55</sup>* 喊 ‘shout’ and *t<sup>h</sup>i<sup>44</sup>* 听 ‘listen’, which are also straightforwardly dynamic/non-stative. For example:

- (26) 不用打扫呗，傢领上哦走俩  
 pɿ<sup>21</sup> iʃ<sup>42</sup> ta<sup>42</sup>-sɔ<sup>13</sup> pɛ, tɕia<sup>24</sup> liẽ<sup>24</sup>-ʃɔ<sup>53</sup> e tsu<sup>55</sup> lia  
 NEG need hit-sweep PRT 3SG lead-COMPL PRT walk lia  
 ‘There’s no need to sweep. He will take (it) and go.’
- (27) 我也听俩  
 nɔ<sup>44</sup> i<sup>z44</sup> tʰi<sup>44</sup> lia  
 1SG also listen lia  
 ‘I will also listen’
- (28) 那我俩吃俩  
 na<sup>53</sup> nɔ<sup>53</sup> lia<sup>213</sup> tʃ<sup>h</sup>i<sup>44</sup> lia  
 then 1SG two eat lia  
 ‘The two of us will eat.’

Finally, aside from ordinary activity predicates, one future use of *lia* occurred on a *wh*- adverb that, because it is not a complete predicate, cannot technically be regarded as dynamic in terms of situation aspect. However, based on the meaning of the utterance in context given in the translation, this usage seems to have elided the activity verb *pɛ*<sup>42</sup> 办 ‘do’, and so the full sentence (which also occurred in the corpus data) would be *a*<sup>44</sup>*m*<sup>ɔ̃</sup> *pɛ*<sup>42</sup> *lia* ‘what shall we do?’:

- (29) 阿门俩  
 a<sup>44</sup>*m*<sup>ɔ̃</sup> lia  
 how lia  
 ‘What shall (we) do?’ (in Standard Mandarin: *zenme ban* ? Lit. ‘how do?’)

In line with the preceding discussion about activity verbs, a future reading was derived. It is important to note that the dynamic situations marked by *lia* which receive a future reading had this reading irrespective of whether or not adverbials with a temporal function were present (e.g., (22)–(24) and (27)–(28) lack adverbials, but still receive a future reading).

### 5.1.3 *Statives*

So far we have seen that (5) works because achievements, accomplishments and activities are dynamic, but what about the *lia*- marked stative verbs in sentences with future time reference (10 tokens)? These uses all involved contextual support for the future reading, such as the presence of a condition clause which means that the *lia*- marked state will only come about if the condition is fulfilled:

- (30) 我这点哈喝上哈就成俩  
*nɔ<sup>44</sup> tʂ<sup>44</sup> tiã<sup>55</sup> xa xu<sup>44</sup>-ʂ<sup>53</sup> xa tʂiuu<sup>213</sup> tʂə<sup>24</sup> lia*  
 1SG this little OBJ drink-COMPL COND then ok *lia*  
 ‘If I drink this, then it will be OK.’

Also, adverbs with a temporal function, such as temporal locatives like *ciã<sup>42</sup> ɣ<sup>244</sup> ʂ<sup>55</sup> ts<sup>h</sup>ɣ<sup>z21</sup>* 下一星期 ‘next week’ yielded a future reading with *lia* marked stative predicates:

- (31) 下星期啊可能有课俩  
*ciã<sup>42</sup> ɣ<sup>244</sup> ʂ<sup>55</sup> ts<sup>h</sup>ɣ<sup>z21</sup> a k<sup>h</sup>ə<sup>44</sup> nə<sup>55</sup> iu<sup>53</sup> k<sup>h</sup>u<sup>55</sup> lia*  
 next one week PRT perhaps have class *lia*  
 ‘Maybe there is a class next week.’

Similarly, with adverbial clauses which in context referred to a future event, *lia* could mark a stative in the main clause which had future time reference:

- (32) 小毕回去呵有个琢磨头俩  
*ciɔ<sup>44</sup> pi<sup>55</sup> xuei<sup>44</sup> tɕ<sup>h</sup>ɣ<sup>z21</sup> xɔ<sup>53</sup> iu<sup>53</sup> kɔ<sup>24</sup> tsɔ<sup>12</sup> mɔ<sup>21</sup> tu<sup>21</sup> lia*  
 Name return go TOP have CL ponder head *lia*  
 ‘When Xiao Bi goes back, he will be puzzled.’ (*lit.* he will have a pondering head)

The question is whether *lia* is functioning as a future marker in these examples, as in the dynamic predicates considered above, or whether its future-denoting function is absent and *lia* is simply the atemporal mood marker, which commonly marks stative verbs without forcing a future reading (see Section 6 below). Elicited data can shed light on this issue, because it shows that it is possible for *lia* to mark future tense with stative verbs:

- (33) 天气热俩  
*t<sup>h</sup> iə<sup>44</sup> ts<sup>h</sup>ɣ<sup>z213</sup> zɿ<sup>44</sup> lia*  
 weather hot *lia*  
 ‘The weather is hot.’  
 ‘The weather will become hot.’ [Elicited]
- (34) 小王家哈相信俩  
*ciɔ<sup>44</sup> u<sup>z24</sup> tciã<sup>24</sup> xa ciã<sup>44</sup> ci<sup>z</sup>213 lia*  
 NAME 3SG OBJ believe *lia*  
 ‘Xiao Wang trusts him.’  
 ‘Xiao Wang will trust him.’ [Elicited]

On the future reading in Examples (33)–(34), what is indicated is a state which will come about at some point in the future. In de Swart’s (1998) framework, it

can be assumed that the state has been coerced into an (inchoative) event, which is dynamic (see Section 3), denoting the onset of a state. After coercion has applied and mapped the state to a dynamic event, the input conditions of future *lia* are satisfied, hence the grammaticality of the future readings here. Similarly, in Smith's (1997: 70) terminology, a shift in situation type has occurred from a stative to a derived telic situation denoting a change into the state concerned – to either an achievement or accomplishment, depending on whether duration is involved.

Therefore, with regard to Examples (30)–(32) from the corpus data, whether *lia* is interpreted as the future marker or the atemporal mood marker becomes a matter of whether an inchoative reading is present. In (31), which apparently lacks an inchoative reading and is a true stative (i.e., the speaker is speculating about whether the timetable is such that a state of having a class will hold at a given time in the future), the future reading comes from the temporal adverbial (and the contribution of *lia* is in the domain of modality rather than tense). That is, it is assumed that (31) contains a token of atemporal modal *lia* rather than future-denoting *lia* – in line with the fact that *lia*-marked existential/possessive *iuu*<sup>13</sup> 有 in the corpus data was always non-future denoting, except where future-denoting adverbs or other contextual support was present (see Section 6.1 below). However, Examples (30) and (32) can be interpreted as denoting inchoative achievement events, which Dowty (1979: 141) defines as containing a BECOME operator, such that what is denoted by (30) and (32) are events of becoming OK or becoming puzzled, where previously these states did not hold. On this reading, it is predicted that future *lia* may occur.

In support of this analysis is the fact that with individual-level statives, which do not permit an inchoative reading, future marking by *lia* is not possible:

- (35) 这个娃娃，聪明俩  
 tʂʌ<sup>44</sup> kʂ<sup>24</sup> ua<sup>21</sup>ua<sup>24</sup>, t<sup>h</sup>u<sup>44</sup>mi<sup>24</sup> lia  
 this CL child, clever lia  
 ‘This child is intelligent.’  
 ≠ ‘This child will be intelligent.’

[Elicited]

By way of a summary, in the corpus data, *lia*-marked stative verbs were overwhelmingly non-future denoting (112 tokens) (see Section 6.1 below), and thus in the vast majority of cases simply indicated a state holding at the speech time, compared to only 10 uses which were future denoting. Hence where stative verbs allow either a true stative or an inchoative (eventive) reading, they are not by default interpreted as inchoative predicates: the future denoting tokens discussed here occurred in a particular context conducive to an inchoative reading or else received a future reading purely due to the use of lexical strategies like temporal adverbials.

5.1.4 Future *lia* and  $py^{21}$  不 negation

In Xining Mandarin,  $py^{21}$  不 is used to negate future events in uses similar to those found in Standard Mandarin:

(36) 奶茶再不喝，晚上睡不着

$n\epsilon^{24}ts^h a^{42} t\epsilon^{24} py^{21} xu^{44}, u\tilde{a}^{44}\check{s}\tilde{a}^{31} fi^{13} py^{21} t\check{s}^{44}$

milk.tea again NEG drink, evening sleep NEG succeed

‘(I) am not going to have any more milk tea, otherwise I won’t sleep tonight.’

However, elicited data (see (37) below) shows that *lia* is incompatible with  $py^{21}$  negation, consistent with the non-occurrence of *lia* on  $py^{21}$ -marked predicates in the corpus data (though *lia* can occur with  $m\check{\sigma}^{24}$  没 negation, as discussed in Section 6 below). The inability of future *lia* to occur with  $py^{21}$  negation is captured under the generalization that future *lia* selects only +dynamic predicates. In Standard Mandarin, *bù* negation only occurs with states (Ernst, 1995; Lin, 2003), and the same can be assumed to be the case in the Xining dialect, where semantically  $py^{21}$  negation behaves similarly to *bù* in Standard Mandarin (cf. S. Wang & Dede, 2016). That is to say, as in Standard Mandarin,  $py^{21}$  negation occurs with, for example, stative verbs (e.g., the copula), habituals, and modal auxiliaries, which are aspectually stative. Also, as in Standard Mandarin,  $py^{21}$  occurs in sentences that have a volitional/future reading, such as (36), or (37):

(37) 傢那扎不坐(\*俩)

$t\check{c}ia^{24} na^{44} t\check{s}a^{44} py^{21} tsu^{44} (*lia)$

[Elicited]

3SG that place NEG live *lia*

‘He does not want to live here/He will not live here.’

Regarding the stative nature of  $py^{21}$  negation in such future-denoting examples, I follow Lin (2003), who along with Huang (1988) argues that a null volitional or future modal verb is present to derive the reading given in the translation of examples like (36) and (37), and so it is actually this empty modal which is negated by *bù*/ $py^{21}$ . From this perspective, the non-occurrence of future *lia* is expected in these examples with  $py^{21}$  negation, because modals can be regarded as a type of stative predicate (here, a state of intending not to do something), with which *lia* systematically cannot denote future (see Section 6.1.2). However, the fact that *lia* cannot be the affirmative mood marker with  $py^{21}$  negation (see Section 6) is not predicted by the hypothesis in (6), which says that modal *lia* selects stative situations. Rather, as discussed in the following section, this reflects a more general restriction on modal *lia*, which is that it resists use with negation of any kind, even  $m\check{\sigma}^{24}$  没 negation.



## 6. Mood marking with *lia*

Palmer (1986: 16) defines modality as “the grammaticalization of speakers’ (subjective) attitudes and opinions”.<sup>8</sup> Within this domain, epistemic modality is concerned with “the speaker’s attitude to the truth value or factual status of the proposition” (Palmer, 2001: 8). Devices expressing epistemic modality can be further differentiated according to the degree of the speaker’s commitment to the truthfulness of the proposition, with English modals for example forming a spectrum from lesser to greater certainty (from *may* to *must* to *will*). Previous characterizations of the modal contribution of *lia*, for example as *kending* 肯定 (e.g., A. Zhang 2007: 343–4, Ren 2004), which involves a judgement concerning the certainty of the proposition, can be seen to be compatible with this definition of epistemic modality. That is, *lia* can be understood as expressing the speaker’s high degree of “commitment to the truth value or factual status of the proposition” (Palmer 2001: 8). For instance, in the existential possessive sentence in (38), the speaker was strongly affirming that the speaker’s school certainly does have a foreign teacher, perhaps in contrast to other schools which do not:

- (38) 其实我们学校里有外教有俩  
 tɕʰi:z24 ɕiʔ24 nɔʔ44 mǎ ɕyʉ24 ɕiʔ21 l̩ uɛ213 tɕiʔ44 iuʔ53 lia  
 actually 1PL school LOC foreign.teacher has lia  
 ‘Actually our school has a foreign teacher.’

This is thus an (emphatic) epistemic function, conveying the speaker’s judgement concerning the accuracy of the proposition, and the use of *lia* here contrasts with sentence-final particles such as *pa* 吧 which express a low degree of certainty. *Lia* itself is not obligatory as a mood marker, and so (38) is felicitous without it, but if *lia* is removed then the assertion of speaker certainty is also removed and the sentence is simply a declarative statement.<sup>9</sup>

8. Palmer draws a distinction between ‘mood’ and ‘modality’, but I do not distinguish these terms in this discussion.

9. For Xining Mandarin speakers who find OV existential constructions with the existential verb *iu*<sup>13</sup> awkward, such as one of my informants, the same holds with the object following *iu*<sup>13</sup>. The presence or absence of *lia* affects the epistemic modality of the sentence, but not its grammaticality:

- (1) 我们学校里有外教(俩)  
 nɔʔ44 mǎ ɕyʉ24 ɕiʔ213-l̩ iuʔ53 uɛ213 tɕiʔ44 (lia)  
 1PL school-LOC has foreign-teacher lia  
 ‘Our school has a foreign teacher.’

Nevertheless, modal *lia* does appear in contexts where its modal contribution is not epistemic, involving certainty. In yes/no questions, where the speaker is not affirming anything, *lia* can simply mark, according to Du (1995: 58), interrogative mood, where the construction derived is similar to that of an A-not-A question in Standard Mandarin. According to Du, the difference between a Standard Mandarin A-not-A question (e.g. *nǐ qù bu qù kàn diànyǐng?* (lit.) ‘you go not go watch film?’) and a *lia*-marked question in Xining Mandarin is that only the latter must have future time reference. However, in this paper it is demonstrated that this analysis only goes so far: in fact, *lia* only yields future reference with aspectually dynamic sentences (in interrogative or declarative contexts). In (39), which is a question containing the stative possessive verb *iuu*<sup>53</sup> 有, *lia* does not force a future reading:

- (39) 你说这个命家有俩没?  
*ŋi*<sup>44</sup> *fɔ*<sup>44</sup> *tʂ*<sup>13</sup> *kɔ*<sup>24</sup> *mi*<sup>213</sup> *tʂia*<sup>24</sup> *iuu*<sup>53</sup> *lia* *mɔ*?  
 2SG say this CL destiny 3SG has *lia* NEG  
 ‘Do you say he has this destiny or not?’

In terms of temporality, it is evident that modal *lia* is atemporal and does not impose any temporal restrictions on the predicate it marks, and so unlike future *lia* which selects dynamic predicates, modal *lia* which selects states can mark states that held in the past (as in (40)), as well as those with present or future time reference (e.g., (39) and (31) respectively).

- (40) 前年学校外教有俩  
*tʂ*<sup>h</sup>*iā*<sup>42</sup>*niā*<sup>24</sup> *ɕy*<sup>u</sup><sup>24</sup>*ɕi*<sup>ɔ</sup><sup>21</sup> *ue*<sup>213</sup>*tʂi*<sup>ɔ</sup><sup>44</sup> *iuu*<sup>53</sup> *lia*  
 previous-year school foreign-teacher has *lia*  
 ‘The year before last, the school had a foreign teacher.’ [Elicited]

Meanwhile, with regard to the modal semantics of the future marking uses of *lia* (i.e., *lia* in dynamic predicates), Du (1995: 58) claims that in declarative clauses, as well as expressing future tense, *lia* simultaneously expresses strong subjective speaker attitude (Ch: *zhǔguān sècǎi* 主观色彩). He illustrates with examples like:<sup>10</sup>

- (41) 你再不来哈，我走俩  
 2SG ADV NEG come COND, 1SG walk *lia*  
 ‘If you still don’t come, I will go.’ (Du 1995: 57)

Whilst this is the case sometimes, it is context-dependent. According to my informant, *lia* can appear in news broadcasts in the Xining dialect in rural areas,

10. The source article did not indicate the pronunciation.

which is a context in which the speaker relays information in an objective manner without conveying subjective attitude. For example,

- (42) 乡亲们，接到上级通知，明儿下大雨俩，注意发大水的消息  
*ciã<sup>44</sup>tç<sup>h</sup>r<sup>44</sup>-mã, tciã<sup>44</sup>-tɔ<sup>13</sup>      šã<sup>13</sup>tʂ<sup>44</sup>      t<sup>h</sup>ɔ<sup>21</sup>tʂ<sup>44</sup>, miã<sup>24</sup>ε      cia<sup>31</sup>*  
 fellow.villager-PL receive-COMPL authorities notification tomorrow fall  
*ta<sup>42</sup>y<sup>z44</sup> lia, tʂu<sup>44</sup>y<sup>z21</sup> fa<sup>44</sup>      ta<sup>42</sup>fi<sup>44</sup> tsɿ<sup>z</sup>      çio<sup>44</sup>ʂ<sup>44</sup>*  
 big.rain *lia*, attend    send flood    POSS message  
 ‘Fellow villagers, receive this notification from the authorities: tomorrow it  
 will rain heavily. Pay attention to (this) flood warning.’ [Elicited] (Menyuan)

*Lia* in (42) is naturally translated with future modal *hui* 会 in Standard Mandarin, which is also used to express predictive future, but which does not convey subjective speaker attitude (see Tsai, 2015). In such uses *lia* simply conveys future tense in the indicative mood.

Moreover, the fact that *lia* in dynamic predicates can express plain future tense without attitudinal/epistemic modality can be seen from the use of *lia* to denote future in conditional clauses. As Haegeman (2010: 629–631) notes, conditional and temporal clauses have often been observed to be a context where speaker-related modality, such as epistemic expressions, cannot be used, and Paul (2015: 561) similarly finds that attitudinal markers in Chinese are banned in non-root clauses. For example, consider (43) (from Haegeman 2010: 630, after Declerck and Depraetere (1995: 278):

- (43) \*John will do it when/if he may/must have time.

However, as discussed above, *lia* can force a future reading in conditional clauses, and so this is another context where *lia* expresses only plain future:

- (44) 你堂会那么冷的地方去俩说哈，你实话感冒哈俩  
*ŋi<sup>44</sup> t<sup>h</sup>ã<sup>213</sup> xui<sup>44</sup>      nε<sup>53</sup>mã lã<sup>55</sup>      tsɿ<sup>z</sup>      tsɿ<sup>z21</sup>fã<sup>24</sup>      tç<sup>h</sup>ɿ<sup>z24</sup>      lia fɔ<sup>53</sup>-xa<sup>35</sup>, ŋi<sup>44</sup>*  
 2SG COND    that    cold NMLZ place    go    *lia* say-COND 2SG  
*ʂ<sup>21</sup>xua<sup>24</sup>      kã<sup>55</sup>mɔ<sup>213</sup>-xa      lia*  
 truth    catch.cold-COMPL *lia*  
 ‘If you go to such a cold place, you will certainly get a cold.’ [Elicited]

A further noteworthy idiosyncratic property of modal *lia*, not possessed by future *lia* is that it strongly tends not to occur with negation. This was not noticed by the previous studies cited in Section 2. Although *lia* frequently occurs with the existential/possessive verb *iuu*<sup>53</sup> 有 ‘have’, as illustrated in (45) it is not found in the corpus data marking *mɔ*<sup>21</sup> *iuu*<sup>13</sup> 没有 ‘not have’. Moreover, in elicitation sessions, informants found that with *mɔ*<sup>21</sup> *iuu*<sup>13</sup> 没有, *lia* could not be used.

- (45) 学校外教没有(\*俩)  
 ʈy<sup>24</sup> ʈi<sup>213</sup> u<sup>213</sup> ʈʈi<sup>44</sup> m<sup>21</sup> iu<sup>13</sup> (\*lia)  
 school foreign-teacher NEG have lia  
 ‘The school does not have a foreign teacher.’ [Elicited]

Likewise, affirmative *lia* occurs with the modal of necessity, but cannot occur when the modal is negated:

- (46) 我们 就 倒车 去 的 要 俩  
 n<sup>44</sup> m<sup>21</sup> ʈʈi<sup>213</sup> t<sup>55</sup> ʈʈi<sup>44</sup> t<sup>h</sup><sub>1</sub><sup>213</sup> t<sup>s</sup><sub>2</sub> i<sup>44</sup> lia  
 1PL just change-car go NMLZ need lia  
 ‘We need to go change buses.’
- (47) 那个孛娃书哈买的不要(\*俩)  
 na<sup>44</sup> k<sup>24</sup> ka<sup>24</sup> ua<sup>44</sup> f<sup>44</sup> xa m<sup>24</sup> t<sup>s</sup><sub>2</sub> p<sup>21</sup> i<sup>44</sup> (\*lia)  
 That CL boy book OBJ buy NMLZ NEG must lia  
 ‘That boy does not need to buy books.’ [Elicited]

One exception to this generalization occurred, however. In (48) *lia* marks a state of not being grown up, and expresses the speaker’s subjective attitude, the modal contribution identified by Du (1995).

- (48) 他才多大着, 三四岁呵, 还没成年俩  
 t<sup>h</sup><sub>1</sub><sup>55</sup> t<sup>h</sup><sub>2</sub><sup>24</sup> tu<sup>44</sup> ta<sup>42</sup> t<sup>ʂ</sup><sub>3</sub> s<sup>æ</sup><sup>44</sup> s<sup>231</sup> sui<sup>55</sup> x<sub>3</sub> xa<sup>24</sup> m<sup>24</sup> t<sup>ʂ</sup><sub>3</sub><sup>24</sup> ni<sup>24</sup> lia  
 3SG only how old IPFV, three four year COND, still NEG grown.up lia  
 ‘He’s only how old? If he’s thirty or forty, and still not grown up...!’

Thus whilst this polarity property is a very robust tendency, it is apparently not an absolute restriction.<sup>11</sup> Future-denoting *lia*, however, which this paper argues selects dynamic predicates, can occur with negation by *m<sup>24</sup>* 没 (but not with the stative negator *p<sup>21</sup>* 不, as discussed in Section 5.1.4 above). This is shown in (49):

- (49) 快点吃啊, 不是哈没有掉俩  
 k<sup>h</sup><sub>1</sub><sup>ue</sup><sup>21</sup> ti<sup>æ</sup><sup>55</sup> t<sup>ʂ</sup><sub>1</sub><sup>h</sup><sup>44</sup> a p<sup>21</sup> s<sup>213</sup> xa m<sup>21</sup> iu<sup>13</sup> ti<sup>55</sup> lia  
 fast little eat PRT NEG be TOP NEG have COMPL lia  
 ‘Eat a bit faster! Otherwise there will be nothing (left)!’

However, it should be noted that, as with Standard Mandarin *méi*, *m<sup>24</sup>* negation is not typically used to negate future events, but rather *p<sup>21</sup>* is used (see Section 5.1.4), and so future *lia* has very few opportunities to occur with *m<sup>24</sup>* negation, even though it can do so. By contrast, negated states are very common (e.g., *m<sup>21</sup>* *iu<sup>13</sup>* 没有 ‘not have’, *p<sup>21</sup>* *s<sup>213</sup>* 不是 ‘not be’, *p<sup>21</sup>* *x<sup>13</sup>* 不好 ‘not good’

11. Note that the incompatibility of modal *lia* with negation does not preclude negative question particles as in (39), which scope over the *lia* -marked affirmative predicate.

etc.), but affirmative *lia* still did not occur in such contexts, showing that there exists a polarity or realis dimension to the meaning of affirmative *lia*, which is used to assert the existence but not the non-existence of a given state of affairs.

### 6.1 Aspectual selection by modal *lia*

The utterances in the corpus data with which *lia* was an atemporal marker of affirmative mood fell into seven categories: stative verbs, modal auxiliaries, progressives, locatives, resultant states, predicates with habitual adverbs, and generic predicates. The crucial point is not necessarily the verb type (although this is relevant if no higher aspectual operators are present) but the final derived aspectual class after all aspectual operators below *lia* are applied. This is because the *vp* itself may be dynamic, but if aspectual operators such as a modal verb or imperfective aspect map the eventuality description to a state, then *lia* was only mood-denoting and not future-denoting.

**Table 3.** *Lia*-marked predicates with non-future time reference.

<i>Homogeneous predicate type</i>	<i>No. of Tokens</i>
<i>Stative verb</i>	112
<i>Modal</i>	48
<i>Progressive</i>	10
<i>Locative</i>	6
<i>Resultant state</i>	15
<i>Habitual adverb</i>	3
<i>Generic</i>	4
<i>Total</i>	198

As Table 3 shows, the two primary contexts in which *lia* was non-future denoting were with stative verbs and modal verbs, and then with a selection of other predicate types. These different usages will now be illustrated in turn.

#### 6.1.1 *Stative verbs*

The most common context in the corpus data in which *lia* was a non-future marking affirmative mood marker was with stative verbs (112 tokens), and of these the existential/possessive verb *iuu*<sup>53</sup> 有 accounted for 67 uses. With these uses, the aspectual class of the stative verb was not modified by higher aspectual operators, and *lia* did not derive a future reading:

- (50) 那个不是吧，娃娃有俩呗  
*nɛ<sup>53</sup> kɔ<sup>35</sup> pɿ<sup>21</sup> sɿ<sup>z13</sup> pa<sup>53</sup>, ua<sup>21</sup>ua<sup>24</sup> iu<sup>53</sup> lia pɛ*  
 that CL NEG be PRT child have *lia* PRT  
 ‘Not that one... He has a child.’

Additionally, adjectival stative verbs took mood marking (36 tokens):

- (51) 我成俩，别人不成  
*nɔ<sup>53</sup> tɕǎ<sup>24</sup> lia, piɛ<sup>24</sup> zǎ<sup>24</sup> pɿ<sup>21</sup> tɕǎ<sup>13</sup>*  
 1SG ok *lia*, other-people NEG ok  
 ‘I’m OK. Other people are not OK.’
- (52) 生活费够俩?  
*sǎ<sup>44</sup>xu<sup>44</sup>fɿ<sup>24</sup> ku<sup>13</sup> lia?*  
 living.cost enough *lia*?  
 ‘Is (this) enough for the cost of living?’

In addition, copula constructions were marked by modal *lia* (6 tokens), and 3 further tokens of *lia* occurred in null copula constructions (which, when translated into Standard Mandarin, require the copula). The latter are illustrated by (54), which could alternatively be classified as a (non-literal) locative.

- (53) 小张就是俩  
*ciɔ<sup>44</sup> tɕǎ<sup>44</sup> tɕiu<sup>213</sup> sɿ<sup>z53</sup> lia*  
 NAME really be *lia*  
 ‘This really is Xiao Zhang.’
- (54) 那个谁说着你带小王俩一起哩说啊没  
*na<sup>44</sup> kɔ<sup>24</sup> fi<sup>24</sup> fɔ<sup>44</sup> tɕɔ ηi<sup>44</sup> tɛ<sup>213</sup> ciɔ<sup>44</sup>uɔ<sup>24</sup> lia ɿ<sup>z44</sup>tɕ<sup>ɿ</sup>i<sup>213</sup> l fɔ<sup>53</sup> a mɔ*  
 that CL who say IPFV 2SG and NAME COM together *lia* QUOT PRT Q  
 ‘Who was it that said it, you and Xiao Wang are together?’

### 6.1.2 Stative modal auxiliaries

Another class of predicates with which *lia* functioned as a mood marker rather than as a future marker was modal auxiliaries (48 tokens), which are often regarded as a type of stative predicate (e.g., Lin, 2002: 274). Most common among these were modals denoting ability. For example, (55) contains the completive complement *xa* 哈 after the verb, which indicates that the activity denoted by the verb can be achieved, and in (56), *lia* occurs with an expression of ability formed with the verbal complement *le<sup>24</sup>* 来:

- (55) 也喝哈俩, 吃哈俩  
*iʒ<sup>44</sup> xu<sup>44</sup>-xa lia, tʂ<sup>h</sup>ʅ<sup>z44</sup>-xa lia*  
 also drink-COMPL *lia*, eat-COMPL *lia*  
 ‘(He) can also drink (alot). (He) can also eat (alot).’
- (56) 中国话说来俩  
*tʂü<sup>44</sup>kui<sup>213</sup>xua<sup>31</sup> ʂɔ<sup>44</sup>-lɛ<sup>24</sup> lia*  
 China speech say-come *lia*  
 ‘Can (he) speak Chinese?’

These expressions of ability were generally formed with achievement verbs (resultative verb compounds), but because a modal reading is intended instead of an eventive reading, *lia* could function only as a mood marker and not as a future marker.

Additional affirmative mood uses of *lia* were commonly found with the modal auxiliary *iʒ<sup>44</sup> 要* functioning as a modal of necessity, and occasionally also as a future/volitional modal:

- (57) 单子洗的要俩  
*tæ<sup>44</sup>tsɿ<sup>z</sup> sɿ<sup>z44</sup> tsɿ<sup>z</sup> iʒ<sup>44</sup> lia*  
 sheet wash NMLZ need *lia*  
 ‘The sheet must be washed.’
- (58) 家长全部要去俩  
*tciã<sup>44</sup>tʂɔ<sup>44</sup> tɕ<sup>h</sup>uẽ<sup>21</sup>pu<sup>24</sup> iʒ<sup>44</sup> ts<sup>h</sup>ɿ<sup>z13</sup> lia*  
 Family.head all will go *lia*  
 ‘All of the parents will go.’

### 6.1.3 Progressives

The fact that progressive predicates derived by imperfective ZHE could not be selected by future *lia* but only by modal *lia* is expected in the present account because according to de Swart (1998: 382), progressive aspect performs a mapping from event or process to a state:

- (59) 下着俩俩?  
*ciã<sup>42</sup> tʂɔ lia?*  
 fall IPFV *lia*  
 ‘Is it raining?’
- (60) 念着四年哩吗?  
*niʒ<sup>44</sup> tʂɔ sɿ<sup>z44</sup> niã<sup>24</sup> l ma?*  
 read IPFV four year *lia* Q  
 ‘Is he studying for four years?’

In addition, *lia* occurred with bare activity predicates that had a progressive reading in the absence of an overt imperfective marker (6 tokens), even though usually bare activities marked by *lia* received a future reading (32 bare activity predicates marked by *lia* expressed future events). But for these tokens, a progressive reading was apparently clear from the real world context, and so it was a covert coercion operator, rather than an overt aspect marker, which mapped the eventuality description to a (progressive) state. As de Swart (1998: 363) notes, “the value of the hidden [coercion] operator is dependent on linguistic context and world knowledge”. Because of the contextually derived progressive reading, *lia* fulfilled a solely modal function and did not denote future tense.

- (61) 你胡说俩就  
 ȳi<sup>44</sup> xu<sup>21</sup>fɔ<sup>44</sup>                      lia tciu<sup>213</sup>  
 2SG nonsense-speak *lia* just  
 ‘You are speaking nonsense.’
- (62) 婆娘娃娃子打工俩  
 pɔ<sup>21</sup>niǎ<sup>44</sup> ua<sup>21</sup>ua<sup>24</sup>tsɿ<sup>z</sup> ta<sup>55</sup>kɔ̃<sup>21</sup> lia  
 wife            child            work    *lia*  
 ‘Wife and child are both working.’

#### 6.1.4 Resultant states

The imperfective marker ZHE can also mark resultant states, which can be selected by affirmative *lia* but not future *lia* (7 tokens):

- (63) 祁连的那考啊着俩  
 tʂi<sup>21</sup>liǎ<sup>24</sup>-tsɿ<sup>z</sup> na<sup>44</sup> k<sup>h</sup>ɔ̃<sup>55</sup>-a<sup>42</sup>    tʂɔ    lia  
 Qilian-POSS    that pass-COMPL IPFV *lia*  
 ‘Has that (classmate) from Qilian passed the exam?’

Also, sometimes *lia* marked a resultant state when imperfective aspect was not overtly marked but the context made it clear that a resultant state was denoted. These uses (8 tokens) were with bare achievement predicates, with which *lia* normally had future time reference (76 tokens of future *lia* occurred with achievements). For instance, with *tʂɔ<sup>44</sup>-wǎ* 脏完 ‘dirty-finish’ a resultant state was denoted, which holds at the speech time:

- (64) 裤裤脏完给俩  
 ku<sup>55</sup>ku<sup>21</sup> tʂɔ<sup>44</sup>-wǎ-ki                      lia  
 trousers dirty-COMPL-CAUS *lia*  
 ‘The trousers have been made utterly dirty.’



Meanwhile, in (65) too it was clear from the real world context that the resultant state holds at the speech time:

- (65) 今儿两家人结合到一块俩  
*tciã<sup>44</sup> lia<sup>213</sup> tciã<sup>44</sup> z̃<sup>24</sup> tciã<sup>24</sup> xu<sup>24</sup> tɔ ɾ<sup>244</sup> k<sup>h</sup> uε<sup>55</sup> lia*  
 today two family combine COMPL together *lia*  
 ‘Today (our) two families have come together.’

In these cases, as for the bare progressive activities above, the stative input requirement of affirmative *lia* is not satisfied by an overt aspectual operator, but through coercion, a contextually-induced reinterpretation of the aspectual class of the eventuality description in a certain real world context.

### 6.1.5 *Locatives*

Another class of utterances with which *lia* fulfils a solely modal rather than future marking function was locative constructions, which also present a state (6 tokens of this usage occurred):

- (66) 奥秘呗，阿扎俩对着没？  
*av<sup>44</sup> mi<sup>21</sup> pε a<sup>24</sup>-tʂa<sup>44</sup> lia tui<sup>21</sup> tʂɔ mɔ<sup>53</sup>?*  
 secret PRT Q-place *lia* correct IPFV NEG  
 ‘Secrets, where are (they)? Right?’

### 6.1.6 *Habitual frequency adverbials*

Regarding habitual and iterative frequency adverbs, as discussed in Section 3, these are aspectual operators which perform a stative mapping, and so in this context *lia* is predicted to fulfil a modal rather than future tense function. Examples like (67), which Du (1995: 58) treats as cases of frequentive aspect, were rightly noted by Du not to yield future time reference, but this paper shows that mereologically they belong to the same class of stative situation types as all the other non-future denoting uses.

- (67) 动不动就处分哈背给俩  
*tũ<sup>21</sup> pɿ<sup>21</sup> tũ<sup>21</sup> tciuu<sup>213</sup> tʂ<sup>h</sup> u<sup>21</sup> f̃<sup>21</sup>-xa pi<sup>44</sup> ki lia*  
 frequently just disciplinary.action-OBJ bear CAUS *lia*  
 ‘[He] often bears disciplinary action.’
- (68) 他就天天连上整俩  
*tciã<sup>24</sup> tciuu<sup>213</sup> t<sup>h</sup> iã<sup>44</sup> t<sup>h</sup> iã<sup>44</sup> liã<sup>31</sup>-ʂɔ tʂɿ<sup>255</sup> lia*  
 3SG just everyday connect-COMPL drink *lia*  
 ‘He just drank every day continuously.’

### 6.1.7 Generic predicates

Finally, another type of utterance in which modal *lia* occurred was in generic sentences, which preclude *lia* from denoting future tense because they are aspectually stative, denoting general truths and regularities rather than referring to particular incidents (e.g., Carlson, 1995: 232):

- (69) 人学哈进步俩  
 ʒ̥<sup>24</sup> ɕy<sup>24</sup> xa<sup>42</sup> tcin<sup>21</sup>pɿ<sup>21</sup> lia  
 People study COND advance-step *lia*  
 ‘If people study, they improve.’

This too can be explained in de Swart’s (1998) framework as a case where a null coercion operator maps dynamic eventuality descriptions to states.

In summary, the preceding sections have provided an account of the distribution of *lia* in corpus data, and demonstrated that the future tense function patterns with the aspectual class of the predicate, occurring only with dynamic situations. Before concluding, an alternative analysis to the future tense analysis will be considered briefly but not accepted.

## 7. *Lia* is not an irrealis mood marker

Given that irrealis marking is used in conditional clauses and future contexts cross-linguistically, it is worth considering the possibility (not explored in previous studies) of treating *lia* with dynamic predicates as an irrealis marker. However, an important argument against analyzing *lia* as irrealis is that it is only permissible on conditional clauses that have future time reference (relative or absolute future). Irrealis marking, on the other hand, would be expected to be possible in past conditional clauses as well, since it simply marks non-reality status rather than temporal reference. This is illustrated by two unrelated languages, Iatmul (Papuan) and Russian:

- (70) *Saanya kla-ikiya-j-a-n nyigi gu kla-ikiya-di*  
 money get-IRR-3PL-SR-NR bitter water get-IRR-3PL  
 ‘If they had received money, they would have bought beer’  
 (Jendraschek, 2014: 154)
- (71) *Esli by ja pribyl na vokzal, menja by posadili v tjur’mu*  
 if I arrive(IRR) at station me put(IRR) in prison  
 ‘If I had shown up at the station, they would have thrown me in prison.’  
 (Chung & Timberlake, 1985: 251)

By contrast, as shown in (19) above (repeated here), *lia* cannot occur in past conditional clauses:

- (72) 夜来我西宁去了(\*俩)哈, 我我的朋友哈见哈俩  
 $i^{z213}l\epsilon^{24}$   $n\sigma^{44}$   $s\gamma^{44}$   $\eta i\tilde{\sigma}^{21}$   $ts^{h_2}z^{13}$   $li\sigma$  (\*/*lia*)  $xa$   $n\sigma^{44}$   $n\sigma^{44}$ - $ts\gamma^z$   $p^h\epsilon^{21}iu^{13}$   
 yesterday 1SG Xining go PFV (\*lia) COND 1SG 1SG-POSS friend  
 $xa$   $tci\tilde{\epsilon}^{213}$ - $xa$  *lia*  
 OBJ see-COMPL *lia*  
 ‘If I had gone to Xining yesterday, I would have seen my friend.’ [Elicited]

This means that although *lia* shows some functional overlap with irrealis markers in that both mark future and conditional clauses, the core future semantics of *lia* constrain which irrealis contexts it can occur in.

An additional indication that *lia* in dynamic predicates is not an irrealis marker is that, as with Standard Mandarin *hui* 会 (Su, 2008), in condition clauses an indicative interpretation is available in addition to a counterfactual reading, which shows that the semantic contribution of *lia* is independent of reality status:

- (73) 夜来你西宁去了哈, 你我的朋友哈见哈俩  
 $i^{z213}l\epsilon^{24}$   $\eta i^{44}$   $s\gamma^{44}$   $\eta i\tilde{\sigma}^{21}$   $ts^{h_2}z^{13}$   $li\sigma$   $xa$ ,  $\eta i^{44}$   $n\sigma^{44}$ - $ts\gamma^z$   $p^h\epsilon^{21}iu^{13}$   $xa$   
 Yesterday 2SG Xining go PFV COND 2SG 1SG-POSS friend OBJ  
 $tci\tilde{\epsilon}^{213}$ - $xa$  *lia* [Elicited]  
 see-COMPL *lia*  
 ‘If you went to Xining yesterday, you will have seen my friend.’ (IND)  
 ‘If you had gone to Xining yesterday, you would have seen my friend.’ (CF)

On the indicative reading, *lia* occurs in a realis rather than irrealis predicate, but on the counterfactual reading, it marks an irrealis clause. But the core futurity requirement is satisfied on both readings, since the *lia*-marked clause temporally follows the topic time denoted by the conditional clause. Again, this indicates that *lia* is constrained to future contexts (here, relative future) rather than to irrealis contexts.

## 8. Conclusion

In conclusion, this paper has shown that the future tense and affirmative mood marking functions of *lia* are conditioned by the aspectual class of the situation it selects: with stative situations, *lia* is an atemporal affirmative mood marker, but with dynamic situations, *lia* denotes future tense. As such, the paper provides evidence of what de Swart (1998) calls “aspectually sensitive tenses”. However, it can be noted that it is not as unusual as it might at first seem that we have found an

aspectually sensitive tense in a Chinese dialect, because other similar cases are also attested. For example, in some respects, *lia* is a mirror image of *de* in Standard Mandarin, which behaves like a past tense marker with *vP* complements which are dynamic events, but as an emphatic affirmative marker with stative *vP* complements (see Lin, 2016). Finally, for reasons of space, the origin of *lia* has not been discussed here, but in Bell (2017), where the contact scenario in Qinghai is also explored in detail, it is argued that the future marking function was calqued on to native Chinese mood marker *li*, which is attested in Yuan dynasty texts as a state marker with a similar modal function to *lia* in stative predicates. This is noteworthy because it helps explain the relation between the future and atemporal modal usage, and the fact that even as a future marker, *lia* can still convey speaker attitude (e.g., (41) above); on such an account, the original modal meaning of *li/lia* was not entirely lost following its extension to a future marker.

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## Appendix. Operational tests

(quoted from Chen and Shirai 2010)

Predicates are indicated in bold italics.

### Step 1. State or nonstate (*nondynamic vs. dynamic*)

The verb (or verb phrase) cannot have a habitual interpretation without any aspect marker attached, can it?

If it cannot → state (e.g., *Wo ai ni* ‘I love you’ → no habitual reading)

If it can → nonstate (e.g., *Wo tiantian chi mifan* ‘I every day eat rice’ (I eat rice every day) → habitual reading possible) → Go to Step 2

### Step 2. Punctual or durative

[If test (a) does not apply, apply test (b)]

(a) Can you say ‘X kaishi vp’ (= ‘X begin to vp’) without an iterative interpretation?

– If you cannot → Achievement (e.g. #*Ta kaishi si* ‘he begins to die’) → Go to step 4.

– If you can → Accomplishment (e.g. *Ta kaishi xie yi feng xin* ‘he begins to write a letter’) or Activity (e.g., *Ta kaishi paobu* ‘he begins to run’) → Go to Step 3

(b) Can you say ‘X will vp at Y o’clock (e.g. 2 o’clock) sharp’?

– If you can → Achievement (e.g. *Huiyi hui zai 2 dian zheng kaishi* ‘Lit: meeting will at 2 o’clock sharp begin’ (The meeting will begin at 2 o’clock sharp) → Go to step 4

If you cannot → Accomplishment or Activity → Go to Step 3

### Step 3. Accomplishment or Activity/*semelfactive (Telic vs. atelic)*

[If test (a) does not apply, apply test (b)]

(a) Can ‘X chadianrvp le’ (= ‘X almost vp le’) mean ‘X started V but did not complete it’?

– If it can → Accomplishment (e.g. *Ta chadianr pao dao xuexiao le* ‘Lit: he almost run arrive school le’ (he almost ran to the school) can mean that he started running but he didn’t reach the school).

– If it cannot → Activity or semelfactive (e.g. *Ta chadianr pao le bu* ‘he almost ran le’ (he almost ran) can only be interpreted as he almost started running) → Go to Step 4.

(b) Can you say ‘X will vp for Y time’ (e.g., 10 min)?

– If you can → Activity (e.g., *Ta hui zuo 10 fenzhong* ‘he will sit for 10 minutes’) or semelfactive (*Ta kesou le 10 fenzhong* ‘he coughed for 10 minutes’).

– If you cannot → Accomplishment (e.g. #*Ta pao dao xuexiao 10 fenzhong* ‘he run arrive school 10 minutes’ (#He ran to school for 10 minutes) → Go to Step 4.

#### *Step 4. Achievement or Semelfactive*

Can you say 'X zai vP' with iterative/repetitive (i.e. iteration on one occasion. Not habitual) interpretation?

- If you can → Semelfactive (e.g. *Ta zai kesou* 'he zai cough' [he is coughing])  
If you cannot → Achievement (e.g. #*Ta zai si* 'he zai die')

#### *Author's address*

Daniel Bell  
School of English Literature, Language and Linguistics  
Newcastle University  
Percy Building, Newcastle upon Tyne  
NE1 7RU  
United Kingdom  
dannn.bell@gmail.com