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# ATINER's Conference Paper Series LNG2015-1543

What is Moving?
Chinese TIME PASSING IS
MOTION Revisited

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This paper should be cited as follows:

Huang, S. (2015). "What is Moving? Chinese TIME PASSING IS MOTION Revisited", Athens: ATINER'S Conference Paper Series, No: LNG2015-1543.

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URL Conference Papers Series: www.atiner.gr/papers.htm
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ISSN: 2241-2891 30/07/2015

### What is Moving? Chinese TIME PASSING IS MOTION Revisited

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#### Abstract

This study investigates Chinese "Motion-Verb + Time" structure with an aim to identify the construal of moving entity (or entities) in this construction, and further mull over its possible implications to Chinese TIME PASSING IS MOTION. Converging data from corpus investigation, questionnaire, and experiment support that the omitted subject in this structure is conceivable as both a moving ego and the moving time, but preferably as time. We conclude that this structure is a subcase of moving time, in line with Ahrens and Huang (2002). "Moving time" is proved to be predominant in Chinese, but instantiations of time metaphors requires more flexible framework to allow interactions with and co-existence of "moving ego" in the same context.

**Keywords:** Time Metaphor, Chinese, Moving Time, Moving Ego.

**Acknowledgments**: This study is granted by Taiwan Ministry of Science and Technology under the research project entitled "Time metaphors in Chinese and English and conceptualization of time zones" (NSC 102-2410-H-110-010-MY2). Our special thanks goes to Chinese Sketch Engine research team which allowed us to use the sketch engine and the Chinese database for Study 1. All errors remain mine.

#### Introduction

This study investigates Chinese TIME PASSING IS MOTION metaphors, scrutinizing the relative dominance of its two sub-models: Moving Time (MT) and Moving Ego (ME). Specifically, focus is placed on a "Motion-Verb + Time" structure, as ambiguity arises over WHAT was moving along the time axis. Previous studies fail to pin down a reading as to whether the subject (i.e. the moving entity) is the viewer (or ego), an abstract notion of time, or an ego attached to time. To verify conflicting views, we launched three studies to identify the moving object. Converging results show that such structure is conceivable as both ME and MT, but preferably as MT. The finding supports Ahrens and Huang (2002) that this structure is a subcase of MT. The conclusion follows that Chinese construals of time is more complicated than MT-ME two-way division.

Cross-linguistic studies have demonstrated that speakers the world over, when talking about the passage of time, envisage time as a moving entity. Two sub-models are postulated (Clark 1973; Lakoff and Johnson 1999; Gentner et al. 2002; Gentner 2001). The Moving Time (MT) model is a construal in which the speaker imagines time as moving along a temporal axis, from the past to future, and the viewer stands watching. The other is a Moving Ego (ME) model in which the viewer moves on a static temporal axis, and reaches specific temporal points. In English, for example, MT is manifested in sentences such as Time flies, or The show is drawing near. ME, on the other hand, is illustratable as in We just stepped into a new millennium or We have entered a new age of mass marketing. The psychological reality of these two models has been verified by experiments – results showed that switch between the two models led to processing cost (Gentner and Imai 1992; McGlone and Harding 1998). McGlone and Harding (1998) suggested that in ME, the ego is moving facing the future, so the resulting construal is "later time in front of earlier time." On the contrary, in MT, time is moving toward ego, or past-ward, which leads to the construal "earlier time in front of later time." An ambiguous expression like "a meeting is moved forward" is interpretable in ME as "moved to a later time" while the MT construal yields an opposite interpretation that "the meeting is moved to an earlier time." One thing to be noted is that these two models are not mutually-exclusive; the two construals may co-exist in the same sentence, an idea known as "duality" in Lakoff (1993).

In different speech communities, researchers have found that the expositions of these two models can be quite diverse. In English, ME is a predominant model (Boroditsky 2000; Gentner 2001). Gentner et al. (2002) investigated English speakers' ability to switch between ME and MT models. The result showed that participants were faster in understanding ME- than MT-based expressions. Boroditsky and Ramscar (2002) examined English speakers' preferred models of moving time, and the data also showed a penchant for ME over MT. Some languages are, on the contrary, claimed to be MT-predominant, such as Malagasy (Dahl 1995) and Chinese (Tai 1993; Lai 2002; Lai and Boroditsky 2013). In particular, Lai and Borodistky (2013)

demonstrated that Chinese speakers tend to reason with MT. In one of their experiments, they followed McGlone and Harding (1998) and asked participants to respond to questions such as "Next Wednesday's meeting has been moved forward two days. What day is the meeting now that it has been rescheduled?" McGlone and Harding (1998) have already shown that English speakers tend to adopt an ME construal and answered "Friday." Lai and Borodistky (2013) instead showed that Chinese speakers were prone to "Monday," i.e. earlier time in the front.

However, the findings in Lai (2002) and Lai and Boroditsky (2013) may not have addressed all the controversies raised in Chinese literature. Huang and Hsieh (2007) reported a contradicting result; Chinese speakers were faster to understand ME-based sentences when the stimuli were presented in Chinese, but faster to understand MT when the sentences are in English. Further studies have to be done to verify whether the inconsistent results came from participant idiosyncrasies.

This problem is further complicated by Chinese grammar. Generally, MT sentences are led by a temporal subject such as "time" or "yesterday," while ME expressions take a human subject such as "I" or "we." In Chinese, omission of subjects is frequent and natural, and some expressions therefore leave researchers who aim at a clear classification puzzled. A common structure "Motion-Verb + Time" attracts our attention because the moving entity of the motion verb is omitted, and it has a higher frequency than "Time + Motion-Verb." A correct interpretation of the subject may influence how Chinese construal of TIME IS MOTION is to be analyzed. An example is given below.

(1) <i>Dao</i>	le	jiuqin		shijian,	wo	hai	zai
arrive PROG		to_be	d	time	I	still	
<i>pei</i> accompar	ıy	<i>erzi</i> son		<i>halipote</i> . Harry_Potter			

"The bedtime arrived (or, We arrived at bedtime), but I was still watching Harry Potter with my son."

In (1), the subject of *dao* 'arrive' is omitted, and in Chinese it is conventional to do so. Consequently, it is hard to determine whether time is conceptualized as moving toward a specific point, i.e. bedtime, or it's ego that is moving to the temporal point. Previous studies differ slightly in their proposition, and hence lead to three possible explanations.

<sup>&</sup>lt;sup>1</sup> Abbreviations: CRS (current relevant state marker *le*), INC (inchoative marker), PROG (progressive), and NM (name of specific person/place).

Version 1: The "Motion-Verb + Time" structure is a TIME IS SPACE metaphorical expression of "Subject + Motion-Verb + Location" construction (e.g. *Ta dao taibei le* 'He arrived at Taipei.') As "time" now serves as a landmark in the "Motion-Verb + Time" structure, it is conceived static and the moving entity is presumably the viewer, or ego.

Version 2: According to Alverson (1994), Chinese construal of time is characteristic of moving time and static ego. Based on this assumption, the moving subject might be time, which moves across a temporal landscape.

Version 3: According to Ahrens and Huang (2002), TIME PASSING IS MOTION is interpretable in two special cases. One of the subcases they proposed – TIME PASSING IS A MOVING POINT (with an ego attached) OVER A LANDSCAPE — can account for the case. The ego can be an individual, or is interpreted in a collective sense, such as a country, mankind, or a specific group.

To learn what is conceived as the moving entity in the structure, we launched 3 studies with special focus on this ambiguous structure "Motion-Verb + Time." The result can help us more accurately picture Chinese construals of time, and hence serves as a reference for future studies of language-specific time metaphors.

#### Study 1: A Corpus study of "Motion-Verb + Time"

The first study is a corpus investigation into the relative frequency of the following two structures in (2) and (3). Following Ahrens and Huang (2002), expressions such as (2) take a time phrase as the subject, and are supposedly analyzed as MT construal, or specifically, TIME PASSING IS A MOVING ENTITY. Expressions such as (3) are ambiguous because the grammatical subject is omitted.

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(2) "Time + Motion-Verb"

Jiaofei qixian yi guo jiuhui zidong
cuijiao.

pay deadline INC pass will automatic
expedite
"When the payment is late, it will automatically send the payer a prompt."
```

(3) "Motion-Verb + Time"

Dao le menjin shijian,dianpu yilu tingzhi yingye.

arrive CRS curfew time shop all stop trade "All shops will close under curfew."

We first investigated the frequency of these two structures. Using Chinese Sketch Engine, we made concordances for the co-occurrence of three time phrases *shijian*, *shihou*, and *shike*, all meaning 'time,' with two major motion verbs *dao* 'arrive' and *guo* 'pass.' Although the Chinese Sketch Engine provides several databases varying in size and genre, we based our analysis on "Sinica Balanced Corpus" (SBC) because SBC is doubled-checked for its parsing and tagging, and the source of its linguistic data is also more balanced. After building concordance for the six combinations (2 verbs and 3 time phrases), we manually identify the hits, and made a calculation for each combination. The frequencies for different collocating patterns are illustrated in Table 1 below.

**Table 1.** The Frequency of "Time+dao/guo" and "dao/guo+Time" in SBC.

Types	Motion-Verb + Time	No.	Time + Motion-Verb	No.
Dao-type:	dao + shijian	25	shijian + dao	65
arrive + TIME	dao + shihou	133	shihou + dao	9
	dao + shike	18	shike + dao	3
		176		77
Guo-type:	guo + shijian	32	shijian + guo	37
pass + TIME	guo + shihou	10	shihou + guo	0
	guo + shike	0	shike + guo	0
		42		37
Total		218		114

Based on the result, the subjectless "Motion-Verb + Time" structure (176 tokens) is more frequent than "Time + Motion-Verb" (77 tokens). If the unrealized subject is analyzed as moving ego, the result seems to suggest that ME is stronger than MT in this case. Nevertheless, a close look at the instances shows that such analysis is oversimplified. In particular, the following examples invite us to reexamine the case minutely. In many "Time + Motion-Verb" instances, such as (4), the subject is time, and it moves past a temporal point "midnight." Again in (5), time is the subject that moves and reaches a clock time "five."

(4) shijian yi guo wuye, dan xiulin time already pass midnight but NM haimei huijia not\_yet go\_home "Midnight had passed, but Xiulin had not yet been home."

(5) shijianyi dao wudian, dajia kaishi
time INC arrive 5\_o'clock everyone start
dabao xingli
pack baggage

"It's five o'clock, and everyone started to pack the baggage."

Based on these examples, it is reasonable to assume the double interpretation of "time" in Chinese: one as a moving entity, and the other as a "temporal field with fixed time points." In other words, the omitted subject of "Motion-Verb + Time" does not have to be ego or human; it can be moving time. We conclude that more studies are needed in order to learn its proper analysis that best describes the mental construal of moving time in the mind of Chinese speakers.

#### Study 2: A Subject-Identification Questionnaire

#### Materials

To resolve our doubt raised in the first study, Study 2 attempts to resort to speaker intuition to learn what the speakers feel is moving in these expressions. Five ambiguous instances of "Motion-Verb + Time" were selected, together with five filler sentences, to make a questionnaire. Please refer to Appendix 1 for the ambiguous sentences.

#### **Participants**

90 NSYSU students taking a General English Course were invited to complete the questionnaire, among which 33 accomplished the task. They were native Chinese speakers, 21 females and 12 males, aged from 18 to 22.

#### Procedure

Participants received a link to the online questionnaire. For each stimulus sentence, participants were asked to identify the missing subject from two options. For our target sentences with ambiguous reading, the two options were a time phrase and a human NP (sometimes a group). As for the fillers, the options were a non-human entity and a human NP. The order of the stimulus sentences and the two options were balanced. Participants were forced to choose only one option, but if they felt both options were not satisfying, they were allowed to provide their free response to each blank by keying in a noun.

#### Result

After collecting the responses from the participants, we calculated the number of time-responses, ego-responses, and irrelevant responses for each target sentence. Table 2 summarizes the result of Study 2.

**Table 2**. Responses of the Subject-Identification Questionnaire.

Test sentences	Response_Time	Response_Ego	Irrelevant
Day	17	14	2
Hour	10	23	0
Clock time	27	4	2
Season	15	17	1
Century	17	15	1
	86 (52.1%)	73 (44.2%)	6 (3.7%)

The result shows that participants, after reading those ambiguous sentences, were more likely to interpret the moving theme as "time" than as "ego," but the difference is not significant, respectively 52.1 and 44.2% (3.7% irrelevant responses are excluded). We reckon that both time and ego are acceptable for the participants as the subject of the structure, and none of them insist on using time or space in all five target sentences.

#### **Study 3: Processing Experiment**

#### Materials

Twelve short texts with ambiguous reading were selected for test. Each text contains two "Motion-Verb + Time" sentences. Theoretically, one "Motion-Verb + Time" sentence should be enough to trigger an MT or ME reading, but to increase the effect and to make the context more accessible to the participants, two "Motion-Verb + Time" sentences were used.

Followed by each short text, participants were presented with two options — one went with the previously-shown text and the other didn't – and they were asked to select the logical one. All options are presented in two construals: MT and ME. To balance the exposure to two construals, we divided the materials into two versions, each version containing six ME options and six MT options. Please refer to Appendix 2 for the two versions.

<sup>&</sup>lt;sup>1</sup>The following responses are analyzed as time: *shijian* 'time,' *shidai* 'time; era,' and *shixu* 'time course.' The following responses are analyzed as ego: *renlei* 'mankind,' *shijie* 'world,' *women* 'we,' *huiyi* 'meeting,' and *guojia* 'country.' Irrelevant responses refer to non-NP responses such as "in the afternoon," or "based on the news."

#### **Participants**

Twelve participants were recruited to join this experiment for a pay of NT100 (approx. \$3). They were 6 males and 6 females, all native Chinese speakers, aged 18-24.

#### Procedure

Participants were experimented on computer screens. A two-sentence text showed at the center of the screen for 4 seconds, and then a fixation "+" appeared when participants were asked to gaze at it. When the fixation disappeared after 500 milliseconds, two options automatically showed up, and the participants were asked to choose with the keyboard an answer that went with the previously-shown text. When a participant finished selecting an option, a new two-sentence text was displayed. The 20 texts were randomized, and the correct options for each of them were balanced.

#### Result

Accuracy was very high no matter a text is followed by MT options or ME options. The accuracy was 95.8% for ME options, and 98.6% for MT options. The difference is not significant. Nevertheless, everything being equal, paired t-test shows that the same text followed by MT options was more quickly responded to than when followed by ME options (t = 2.61, p<.05). The average RT for MT options is 1791.8 ms, and 2037.6 ms for ME options.

#### **General Discussion**

In Study 1, we show that in a chosen corpus, "Motion-Verb + Time" (ambiguous reading) is more frequent than "Time + Motion-Verb" (MT reading). Although Study 1 does not tell us a proper analysis of "Motion-Verb + Time," its high frequency justifies our interests in this structure, and offers the background for us to dig deeper. In Study 2, responses from Chinese native speakers demonstrate that the missing subject of "Motion-Verb + Time" can be "ego" or "time," but "time" is slightly preferred. In Study 3, participants' RT show that those ambiguous sentences, when followed by MT-based sentences, are faster to be responded to than when followed by ME construals. In other words, an MT analysis appears to be more fundamental. Still, to avoid falling into the pitfall of simplification, let us briefly examine the existing hypotheses for more support.

A tendency is found in more recent studies that a simple ME-MT division cannot gracefully account for Chinese expositions of TIME PASSING AS MOTION metaphor. Yu (1998) proposes two inference patterns — Case 1 and Case 2 — for Chinese TIME AS SPACE metaphors, roughly equivalent to MT and ME, but he also cites Lakoff and Turner (1989) for an additional inference pattern Case 3 in which time and observer move in the same direction over stationary temporal landscape. Chiu (1998) basically follows Yu (1998), but she believes Case 3 is better classified as a general pattern for Case 1, reducing

the inference patterns to two. Ahrens and Huang (2002) suggest TIME PASSING IS MOTION can gracefully account for existing instantiations, and its two special cases are in essence consistent: TIME PASSING IS A MOVING OBJECT in which time moves toward the ego, and TIME PASSING IS A MOVING POINT ON A LANDSCAPE in which a "time point" is moving, and ego is attached. The ego can be collective sense for an achievement motion verb, or a singular sense for an activity motion verb. Table 4 summarizes three major studies regarding MT-ME controversy.

**Table 4**. Three Postulations of Chinese Time Metaphors in Comparison.

Yu (1998)	Chiu (1998)	Ahrens and Huang (2002)
Case 1: Time as moving	Both time and ego are	TIME PASSING IS MOTION
toward the face of the	moving.	1. TIME PASSING IS A
stationary Observer		MOVING ENTITY
		2. TIME PASSING IS A
		MOVING POINT ON A
		LANDSCAPE (the ego is
		attached to this point)
Case 2: Time as bounded	Ego was moving and	
space over which the	time is stationary.	
Observer is traveling		
Case 3: A subcase of Case		
2. Time as both a moving		
entity and a fixed location		

Our investigation on "Motion-Verb + time" structure carries some implications to these existing claims. First, if the "Motion-Verb + time" structure omits a time subject, it means latently, the omitted the subject is a "moving entity," and the explicated post-verbal "time" is interpreted as a "fixed location." In other words, this structure perfectly exemplifies Yu's Case 3, or Ahren's and Huang's special case 2. If a framework is to gracefully account for Chinese TIME PASSING AS MOTION, it inevitably has to acknowledge such double interpretation of "time"— both kinetic and stationary. Any simple binary division of ME-MT may fail to be explanatory in the Chinese context.

Second, previous researches disagree as to whether Case 3 is MT or ME, and our study offers some clues. In Yu's framework, Case 3 is subsumed under Case 2, and hence implies an ME interpretation. Following Lakoff and Turner (1989), he mentions that Case 3, like Case 2, requires a temporal landscape and a moving observer. But his decision to call it an independent "Case 3" shows his awareness of its uniqueness and very likely its incompatibility with Case 2. Chiu (1998) combines it with Case 1, suggesting an MT interpretation instead. Ahrens and Huang (2002) apparently adopt an MT interpretation by incorporating it with the TIME PASSING IS MOTION metaphor. In our Study 2, participants answered the questionnaire preferably in an MT model. In Study 3, MT seems to be a fundamental construal as MT options are faster to be responded to. It follows that when MT is adopted, ME is a logical inference as none can resist the flowing of time and the changes it brings about (Chiu

1998), but on the contrary, MT is not as easily accessible as an inference of ME. Still, we consider Ahrens and Huang's (2002) description more appropriate for our case, as "ego" is depicted as "attached" to time, which can better show the relative dominance of moving time over moving ego.

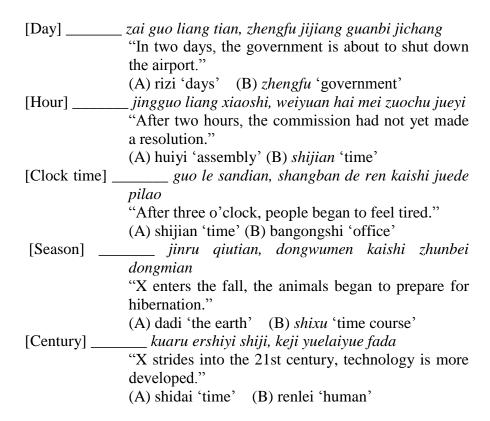
Finally, our study suggests that whether a subject precedes the motion verb or not, "time" is in motion. In other words, all structures in Table 1 (Study 1) are MT construal. It follows that Chinese is highly MT-predominant. Nevertheless, the study of Huang and Hsieh (2007) remains puzzling in this regard. Their finding that Chinese participants are faster in understanding ME sentences is contradictory to existing frameworks and also to our analysis. Further verification is needed.

Some questions remain to be answered. Gentner et al. (2002) pointed out that ME is easier to understand and process, as it fits better human experience of moving about in space. It is evidenced in English, but not in Chinese. Are Chinese speakers prone to objective conceptualization, against a common egocentric inclination? Does it have any cognitive or cultural implication? They are questions that are saved for our further study.

#### Appendix 1. Sentences for Study 2

Instruction: For each blank, choose a noun that best completes each sentence. Or enter a noun that you think makes the most sense of the sentence.

Targets (Ambiguous Sentences)



#### Appendix 2. Stimuli for Study 3

#### Setting Text 1

*jingguo shijiu shiji, jinru ershi shiji,* 'X passed the 19<sup>th</sup> century, entered the 20<sup>th</sup> century,'

#### Options (ME): Version 1

- (A) renlei laidao diannao shidai. 'Humans entered the computer era.'
- (B) renlei laidao shiqian shidai. 'Humans entered the prehistoric age.'

#### Options (MT): Version 2

- (A) diannao shidailai lailin le. 'The computer era arrived.'
- (B) shiqian shidai lailin le. 'The prehistoric age arrived.'

#### Setting Text 2

dao le wushisui, kuaru gengnianqi,

'X arrived the age of 50, entered the Menopause period,'

#### Options (MT): Version 1

- (A) nuxing de fanzhiqi daolai. 'Females' breeding period arrived.'
- (B) nuxing de shuaituigi daolai. 'Females' declining period arrived.'

#### Options (ME): Version 2

- (A) nuxing jinru fanzhiqi. 'Females entered the breeding period.'
- (B) nuxing jinru shuaituiqi. 'Females entered the declining period.'

#### Setting Text 3

dao le ershier shiji, maixiang taikong shidai, 'X arrived the 22<sup>nd</sup> century, entered the Space Era,'

#### Options (ME): Version 1

- (A) renlei jinru waixing zhimin de shiqi. 'Humans entered the outer space colonial period.'
- (B) renlei jinru caiji yulie de shiqi. 'Humans entered the period of fishing, hunting, and gathering .'

#### Options (MT): Version 2

- (A) caiji yulie de shiqi daolai. 'The period of fishing, hunting, and gathering arrived.'
- (B) waixing zhimin de shiqi daolai. 'Outer space colonial period arrived.'

#### Setting Text 4

jingguo shiqi shidai, jinru qingtong shidai,

'X passed the prehistoric age, entered the Bronze Age,'

#### Options (MT): Version 1

- (A) qingchao jiuci zhankai. 'Qing Dynasty started.'
- (B) zhouchao jiuci zhankai. 'Zhou Dynasty started.'

#### Options (ME): Version 2

- (A) zuxianmen jinru qingchao. 'Ancestors entered Qing Dynasty.'
- (B) zuxianmen jinru zhouchao. 'Ancestors entered Zhou Dynasty.'

#### Setting Text 5

dao le jiuyue, jinru qiu tian,

'X arrived September, entered autumn,'

#### Options (ME): Version 1

- (A) nongrenmen dao le shouhuoqi. 'Farmers arrived the harvest.'
- (B) nongrenmen dao le dichaoqi. 'Farmers arrived the depression.'

#### Options (MT): Version 2

- (A) shouhuoqi zhongyu daolai. 'The harvest finally arrived.'
- (B) dichaoqi zhongyu daolai. 'The depression finally arrived.'

#### Setting Text 6

duguo manzhang dongji, dao le meinian sanyue,

'X passed the long winter, arrived March every year,'

#### Options (MT): Version 1

- (A) luoye de qiuji jiu hui lailin. 'Leave-falling autumn arrived.'
- (B) kaihua de jijie jiu hui lailin. 'Blossom season arrived.'

#### Options (ME): Version 2

- (A) dadi jinru luoye de qiuji. 'The earth entered autumns when leaves fell.'
- (B) dadi jinru kaihua de chunji. 'The earth entered seasons when flowers bloomed.'

#### Setting Text 7

guo le shier sui, lijing xiaoxue jieduan,

'X passed the age of 12, went through the elementary school phase,'

#### Options (ME): Version 1

- (A) wo jijiang mairu guozhong qiuxue jieduan. 'I was going to enter the junior high school phase.'
- (B) wo jijiang mairu daxue qiuxue jieduan. 'I was going to enter the university phase.'

#### Options (MT): Version 2

- (A) guozhong jieduan jiezhe lailin. 'The junior high school phase then arrived.'
- (B) daxue jieduan jiezhe lailin. 'The university phase then arrived.'

#### Setting Text 8

guo le liangnian, lijing shijici bisai,

'X passed the two years, went through tens of competitions,'

#### Options (MT): Version 1

- (A) ta de huaiyunqi zongsuan jieshu le. 'His pregnant period ended.'
- (B) ta de xunlianqi zongsuan jieshu le. 'His training period ended.'

#### Options (ME): Version 2

- (A) ta zongsuan aoguo le huaiyunqi. 'He passed the pregnant period.'
- (B) ta zongsuan aoguo le xunlianqi. 'He passed the training period.'

#### Setting Text 9

dao le nanian dongtian, guo le eryue,

'X arrived the winter that year, passed February,'

#### Options (ME): Version 1

- (A) wo haimei duguo shilianqi. 'I had not got over the breakup.'
- (B) wo haimei duguo chanluanqi. 'I had not passed the egg-laying period.'

#### Options (MT): Version 2

- (A) wo de shilianqi haimei guoqu. 'My heart-broken time had not passed.'
- (B) wo de chanluanqi haimei guoqu. 'My egg-laying period had not passed.'

#### Setting Text 10

guo le hunli zhihou, jinru xingfu shenghuo,

'X passed the wedding ceremony, entered the newlywed life,'

#### Options (MT): Version 1

- (A) *liangren de tongnian yanxu le liushinian*. 'Their childhood lasted for 60 years.'
- (B) liangren de aiqing yanxu le liushinian. 'Their love lasted for 60 years.'

#### Options (ME): Version 2

- (A) liangren duguo le liushinian de tongnian shenghuo. 'They passed the 60-year childhood life.'
- (B) *liangren duguo le liushinian de aiqing shenghuo*. 'They passed the 60-year love life.'

#### Setting Text 11

lijing duonian molian, daoda biye dianli shi,

'X went through years of sufferings, arrived the graduation ceremony.'

#### Options (ME): Version 1

- (A) ta kaixindi buru rensheng xin lucheng. 'He happily entered the journey of the new life.'
- (B) ta kaixindi buru fenmu. 'He happily entered the tomb.'

#### Options (MT): Version 2

- (A) ta yingjie rensheng xinlucheng de daolai. 'He welcome the coming of the journey of the new life.'
- (B) ta yingjie liming de daolai. 'He welcome the coming of the dawn.'

#### Setting Text 12

dao le natian banye, guole liang dian,

'X arrived midnight, passed two o'clock,'

#### Options (MT): Version 1

- (A) tade qingchunqi hai mei dao. 'His puberty had not come.'
- (B) tade shuimianshijian hai mei dao. 'His sleepy time had not come.'

#### Options (ME): Version 2

- (A) ta hai mei dao qingchunqi. 'He had not arrived the puberty.'
- (B) ta hai mei dao shuimianshijian. 'He had not arrived the sleepy time.'

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