

**COUNTER-EXPECTATION IN THAI**

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I dedicate this thesis to God.

Having taken tests along this academic journey, I realise that though I was once lost, now I am found.

## Abstract

This study is dedicated to the reinvestigation of the role of the particle *lɛɛw45* in Thai. It raises speculations over the conventional claims according to which *lɛɛw45* plays a role in temporality as a perfective aspect marker (Kanchanawan, 1978; Boonyapatipark, 1983; among others). The reappraisal of the role of *lɛɛw45* in this study, which is based on the use of it in present day Thai, offers an argument against these claims. The addition of *lɛɛw45* to a sentence is not mainly aimed at temporal effects. When it appears in a sentence, *lɛɛw45* does not necessarily denote the perfective aspect of the event. Moreover, it can be omitted in the sentence in which perfectivity is already inherited through the lexical aspect of the verb and the temporal structure of the predicate. *Lɛɛw45* in fact plays a role as a marker of counter-expectation. It represents a previous expectation about the subject and its opposition to the asserted proposition. Examining the nature of *lɛɛw45*'s implications thoroughly, the study has found that even though the definiteness of the subject behaves like a standard presupposition, the implicated expectation does not project in all cases. This is revealed in the results from Tonhauser et al.'s (2013) projection tests. *Lɛɛw45* is context-sensitive and imposes a Strong Contextual Felicity constraint. Nonetheless, it is actually not bound to Obligatory Local Effect and its presence in the context where the projective contents are not entailed is also felicitous. Counter-expectations also involve coherence and relevance, which are determined by the interrelationship between common ground, context, and focus. The asserted proposition is required to correspond to the common ground knowledge and context designated by the expected proposition. Additionally, the expression and interpretation of *lɛɛw45*'s counter-expectations rely on the association of *lɛɛw45* with the focused element in its scope. In a particular case, the common ground knowledge, context, and focus can be identified with the assistance of Question Under Discussion (Roberts 1996, 2012). The mechanism also accounts for the production and interpretation processes proceeding in accordance with the conversational moves.

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## **Author's Declaration**

All of the research presented in this thesis was initiated and carried out by the author from October 2009 to September 2013 under the supervision of Dr. Eytan Zweig, who commented and gave suggestions on the conduct of the project and the analyses of the data based on certain theories. However, the author is responsible for the research presented in this thesis. This thesis has not been previously submitted for another award at this or any other university.



## Preface

*lɛɛw45* is a particle that is commonly used in the Thai language. Its role in the language has been recognised since the early history of Thailand as a marker of perfective aspect. Many studies on Thai temporality have shown an attempt to offer explanations of the operations of *lɛɛw45* and aspect markers when they coexist in the same sentence. These studies include those that apply the tense-based approach (Upakit Silapasarn 1937; Rattanotayanon 1982; Koosamit 1983; and Soithurum 1985) and those that apply the aspect-based approach (Boonyapatipark 1983 and Kulavaniyaya and Bisang 2004). Nevertheless, none of them successfully solves the problematic issues concerning the use of *lɛɛw45*, which has conventionally been considered as a perfective aspect marker.

The empirical data from the present day Thai points out that the conventional idea concerning the function and meaning of *lɛɛw45* might not be totally valid. There is evidence that *lɛɛw45* is used also in situations in which the perfective aspect is inherited through the lexical components of the predicate and that its presence is unnecessary. Moreover, there are many cases in which it does not suggest a perfective reading. Past studies have failed to provide sensible solutions to two problematic issues. First, they do not provide a reason why *lɛɛw45* is allowed in all patterns of aspectual combination and in all types of predicates. Secondly, they do not account for the paradox concerning the operation of the perfective aspect marker in an imperfective/atelic predicate. These two puzzles, which are displayed in the examples below, call for further investigation into the operation and role of *lɛɛw45*.

(1)    phɔɔ42   kam33lan33   ca22   pay33   tham33ɲaan33   lɛɛw45  
      dad        PROG            FUT    go        work            PART  
      'Dad is going to work.'

(2)    maa24   way42nam45   lɛɛw45  
      dog     swim            PART  
      'The dog is swimming.'

Based on the the empirical data which represent the use of *lɛɛw45* in present day Thai, this current study reexamines the meaning and function of *lɛɛw45* while at the same time it is aimed at providing thorough analyses of how the particle operates in the language at the discourse level.

This study offers a fresh claim that *lɛɛw45* should be treated as a particle which plays a role at the discourse level as a marker of counter-expectations. *Lɛɛw45* triggers two implications; namely, the definiteness of the subject and the previous expectation about the subject. Counter-expectation is formed by the existence of the previous expectation and its opposition to the asserted proposition. *Lɛɛw45* is basically blocked when the implicated expectation is invalid. These claims show that aspect, especially the perfective aspect, does not determine the role of *lɛɛw45*. Rather, the compatibility of the particle with a predicate relies on the purpose or the intention of the speaker to convey a counter-expectation to the hearer.

Furthermore, this study examines other factors that possibly come into play in the operation of *lɛɛw45* when it marks a counter-expectation. The empirical data suggest that both the speaker's expression and the hearer's interpretation of *lɛɛw45*'s counter-expectations are influenced by common ground, context, and information structure. These three factors are interrelated in the sense that the common ground knowledge outlines the possible contexts in which the use of *lɛɛw45* is felicitous. Contexts subsequently determine the assignment of focus which interacts with the semantics of *lɛɛw45*. The association of focus and the semantics of *lɛɛw45* provide a clear picture of what the implicated expectation is and what counters it, enabling the hearer to identify the counter-expectation particularly intended by the speaker. In order to describe the entire process which both the speaker and the hearer have to go through, this study adopts the Question Under Discussion technique. With the concept of this technique, *lɛɛw45*'s counter-expectations are formed from a stack of questions which contain both polarity and information questions. Polarity questions are raised by both parties in the conversation in order to check the validity of the implicated previous expectation. The search for the correct information is facilitated by information questions which refer to the current status of the subject.

The structure of this study is as follows. Chapter 1 provides an introduction to the basic structure of Thai. It addresses the nature of the language in general both in terms of its phonological features and its sentence construction. The chapter also provides a brief look at the serial verb construction, which is fairly common in the language. Moreover, it addresses definiteness and the information structure of the language. These two issues are greatly involved in the analyses of *lɛɛw45*.

In Chapter 2 past studies on the temporality of Thai are discussed. The discussion portrays the evolution of the study of this topic, which shows the switch from

tense-based studies to aspect-based studies. Besides the general ways to refer to time, the combinations of aspect markers, which are very distinct in the language, are discussed from the perspectives of both tense-based and aspect-based approaches. At the end of this section, the detection of the flexibility of *lɛɛw45* in various combinations of aspect markers will be presented. This crucial finding raises doubt over the temporal role of *lɛɛw45* as claimed in many past studies. It eventually leads to a need for the reappraisal of *lɛɛw45*'s role.

The past studies on *lɛɛw45*, which were based on various syntactic and semantic theories, are discussed in Chapter 3. The chapter also provides a discussion on a diachronic study of *lɛɛw45*, which reveals some interesting findings concerning the functions and meanings of it from the past to the present. This study also proposes that *lɛɛw45* performs a discourse function. In addition, it suggests that the idea that *lɛɛw45* performs a function outside temporality is not groundless.

Chapter 4 presents an argument against the conventional claim that *lɛɛw45* plays its main role as a perfective aspect marker. Also, it will propose that in fact *lɛɛw45*'s primary role is to mark a counter-expectation. The supportive data for this argument, which are derived from present day Thai, show the compatibility of *lɛɛw45* with various types of predicates. Its presence in a sentence does not always suggest the perfectivity or the telicity of the event. Also, its absence in some cases does not lead to the disappearance of these two temporal features. The chapter further proposes that *lɛɛw45* in fact is used in order to mark a counter-expectation, which is caused by the contrast between the old state and the new state of the issue under discussion.

Chapter 5 presents an attempt to further investigate *lɛɛw45*'s implications, which are preliminarily assumed to be presuppositional. Different tests; namely, Levinson's (1983) presupposition tests, Geurts' (1999) Presupposition Test Battery, and Tonhauser et al.'s (2013) projection tests, have been applied in order to check the existence of the implications in various circumstances. Intriguingly, the results from Tonhauser et al.'s tests indicate that the projective property of *lɛɛw45*'s implicated expectation does not persist in all cases. The results from this set of tests suggest that *lɛɛw45* imposes a Strong Contextual Felicity constraint or, in other words, is context-sensitive. However, it is not restricted by the Obligatory Local Effect, as its presence in the context where its projective contents are not entailed is also acceptable.

Chapter 6 proposes that the operation of *lɛɛw45* also involves coherence and relevance. The chapter begins with a discussion on focus and its relationship with context

and common ground. Then it proposes that the relationship of focus, context, and common ground can be depicted with the application of Question Under Discussion developed by Roberts (1996, 2012). The chapter also points out that in natural language there are many cases in which it is not clear what the expectation is and what counters it. It proposes that *lɛɛw45*'s counter-expectations are generated through the association of the particle with the focused entity in its scope. It offers a counter-expectation that relates to this entity. Even though focus identification is difficult because in Thai focus marking is only optional, it can be carried out with the application of Question Under Discussion.

The final chapter, Chapter 7, discusses the findings from the analyses and indicates their contributions to the operation of *lɛɛw45*. Moreover, it raises issues concerning the behaviour of *lɛɛw45*'s implications, which apply to the cases of other discourse particles and the construction of a model that can effectively predict both the speaker's expression and the hearer's interpretation of *lɛɛw45*'s counter-expectations.

The world is but a school of inquiry.

Michel de Montaigne

## **Chapter 1**

### **A brief introduction to the structure of Thai**

Thai is the language spoken by the people of Thailand, which is located in the southeastern Asian region. The language is one of the Tai languages and is categorised into the southwestern branch together with those languages spoken in Laos, the northern part of Vietnam, India, Burma, and the southern part of China (Li 1977). Generally, there are four major dialects of Thai; namely, the central or standard, the northern, the northeastern, and the southern. All of the data and analyses carried out in this study were based on the central dialect, or standard Thai, which is the dialect spoken in the central part of the country and the one used as the official language.

This chapter presents some essential features of standard Thai, including its phonological system and its basic sentence structure in Sections 1.1 and 1.2, respectively. Moreover, it addresses the serial verb constructions, definiteness, and the information structure of the language in Sections 1.3, 1.4, and 1.5, respectively.

#### **1.1 THE PHONOLOGICAL SYSTEM**

Basically, the syllabic structure of Thai is composed of consonant, vowel and tone. This section presents the phoneme inventory following based on the inventories given by Boonyapatipark (1983) and Sudmuk (2005). The complete sets of these components are shown in Tables 1-5.

### 1.1.1 Consonants

	<b>Bilabial</b>	<b>Labio-dental</b>	<b>Alveolar</b>	<b>Palatal</b>	<b>Velar</b>	<b>Glottal</b>
Voiceless aspirated stops	/ph/		/th/	/ch/	/kh/	
Voiceless unaspirated stops	/p/		/t/	/c/	/k/	/ʔ/
Voiced unaspirated stops	/b/		/d/			
Voiceless fricatives		/f/	/s/			/h/
Lateral			/l/			
Tap			/r/			
Nasals	/m/		/n/		/ŋ/	
Semi-vowels	/w/			/y/		

TABLE 1. Consonants in standard Thai

Some voiceless stops can join the lateral /l/, the tap /r/, and the semi-vowel /w/, forming some initial consonant clusters as shown in Table 2 below:

/phl/	/tr/	/khl/
/phr/		/khr/
/pl/		/kl/
/pr/		/kr/
		/kw/
		/khw/

TABLE 2. Initial consonant clusters in standard Thai

### 1.1.2 Vowels

	<b>Front</b>	<b>Central</b>	<b>Back</b>
<b>High</b>	/i/	/ɯ/	/u/
<b>Mid</b>	/e/	/ə/	/o/
<b>Low</b>	/ɛ/	/a/	/ɔ/

TABLE 3. Vowels in standard Thai

All of the vowels presented in the table have short and long varieties. The long variety of a particular vowel is signalled with the doubling of the vowel symbol. The long variety of the vowel /i/, for example, is /ii/.

Apart from monophthongs, Thai also has three diphthongs which also have short and long varieties, as shown in Table 4. The short variety is represented with the glottal /ʔ/.

/ia/	/ɯa/	/ua/
/iaʔ/	/ɯaʔ/	/uaʔ/

TABLE 4. Diphthongs in standard Thai



### 1.1.3 Tones

There are five tones in Thai. In this study, they are presented through the combinations of numbers.

Mid level	33
Low fall	22
High fall	42
High rise	45
Low rise	24

TABLE 5. Tones in standard Thai

## 1.2 BASIC SENTENCE STRUCTURE AND WORD ORDER

Looking at its basic structure, Thai is an SVO language like English (Campbell and Shawee Wongse 1957). However, unlike English, inflections or other morphological devices do not exist in the language. According to Robins (1971), meanings are attained from the relations of the words in the sentence, which are shown syntactically by means of word order under the SVO structure. This can be seen in (3) and (4):

(3) *khaw*<sup>24</sup> *rak*<sup>45</sup> *thəə*<sup>33</sup>  
 he love she  
 'He loves her.'

(4) *thəə*<sup>33</sup> *rak*<sup>45</sup> *khaw*<sup>24</sup>  
 she love he  
 'She loves him.'

Without morphological inflections, both *khaw*<sup>24</sup> or 'he' and *thəə*<sup>33</sup> or 'she' can perform their functions either as the subject or the object of the sentence. The correct functions of *khaw*<sup>24</sup> and *thəə*<sup>33</sup> as well as the correct meanings of the two example sentences above are derived through the syntactic relations of the three words in accordance with the

word order SVO. Accordingly, in (3) *khaw24*, which precedes the verb *rak45* or 'to love', is the subject of the sentence. On the other hand, in (4) it is located posterior to the verb, which signals that it is the object of the predicate. The same phenomenon also occurs with *thəə33* in both example sentences.

Normally, the positions of words and particles vary individually and are strict. This section will show the restricted positions of some types of words, phrases, and sentences based on the grammatical sketch proposed by Iwasaki and Ingkaphirom (2009).

### 1.2.1 Adjectives and adjectival phrases

In Thai, an adjective or an adjectival phrase is placed in the post-noun position to modify the noun. This is exemplified in (5), where the noun is modified by an adjective, (6), where the noun is modified by a determiner phrase, and (7), where a relative clause acts as a modifier.

- (5)    ma45muaŋ42    **dip22**  
          mango                raw  
          ‘A raw mango/Raw mangoes’
- (6)    ma45muaŋ42    dip22    **sip22**    **luuk42**  
          mango                raw    ten    CLASS  
          ‘Ten raw mangoes’
- (7)    ma45muaŋ42    dip22    **thii42**    **thaa33nii33**    **chəəp42**  
          mango                raw    REL    Thani                like  
          ‘The raw mango(es) that Thani likes’

### 1.2.2 Adverbs and adverbial phrases

Adverbs and adverbial phrases are flexible in terms of their positions in a sentence. They can be placed either at the pre-verbal position or the post-verbal position. As (8) and (9) show, the switch of the position does not have any significant impact on the meanings of the sentences.

- (8) (i) **mua42waan33nii45** mɛɛ42 pay33 ta22laat22  
 yesterday mum go market  
 ‘Yesterday mum went to the market.’
- (ii) mɛɛ42 pay33 ta22laat22 **mua42waan33nii45**  
 mum go market yesterday  
 ‘Mum went to the market yesterday.’
- (9) (i) mɛɛ42 pay33 ta22laat22 **laŋ24caak22 fon24 yut22**  
 mum go market after rain stop  
 ‘Mum went to the market after the rain had stopped.’
- (ii) **laŋ24caak22 fon24 yut22** mɛɛ42 pay33 ta22laat22  
 after rain stop mum go market  
 ‘After the rain had stopped, mum went to the market.’

### 1.2.3 Interrogative words

Yes/no question words and information question words are different in that the former are restricted to the sentence-final position while the positions of the latter vary. Yes/no question words can appear only in the final position of the sentence. Their appearances in the initial position are ungrammatical. On the other hand, information question words are placed to substitute the entity in the sentence that relates to the question the speaker wants to ask. The sentence in (10), for example, displays some possible questions that can be formed from an affirmative sentence using different question words. These questions show the different positions of the information words.

- (10) **thaa33nii33 suu45 plaa33 hay42 mɛɛ42**  
 Thani buy fish give mum  
 ‘Thani bought a fish for mum.’

- Q1: **khraŋ33** suu45 plaa33 hay42 mɛɛ42  
 who buy fish give mum  
 ‘Who bought the fish for mum?’

Q2: thaa33nii33 sɯu45 plaa33 hay42 **kh-ray33**  
 Thani buy fish give who  
 ‘Who did Thani buy the fish for?’

Q3: thaa33nii33 sɯu45 **ʔa22-ray33** hay42 mɛɛ42  
 Thani buy what give mum  
 ‘What did Thani buy for mum?’

#### 1.2.4 Modals

Most modals are restricted to the pre-verbal position, as shown in (11):

(11) thaa33nii33 **khuan33** soŋ22 raay33ŋaan33 phruŋ42nii45  
 Thani MOD hand in report tomorrow  
 ‘Thani should hand in his report tomorrow.’

Nevertheless, the modal *daay42*, which is equivalent to the modal *can* in English, is quite distinct in that it can occur either in the post-verbal position or in the sentence-final position. The former position denotes capability while the latter position denotes permission. An example is provided in (12):

(12) (i) thaa33nii33 soŋ22 raay33ŋaan33 **daay42** phruŋ42nii45  
 Thani hand in report MOD tomorrow  
 ‘Thani is able to hand in his report tomorrow.’

(ii) thaa33nii33 soŋ22 raay33ŋaan33 phruŋ42nii45 **daay42**  
 Thani hand in report tomorrow MOD  
 ‘Thani is permitted to hand in his report tomorrow.’

#### 1.2.5 Negators

In Thai the negator *may42* is used to suggest a negative meaning. When co-occurring with a verb it is placed in the pre-verbal position as shown in (13) below:

- (13) *thaa33nii33 may42 chɔɔp42 thu45rian33*  
 Thani NEG like durian  
 ‘Thani does not like durians.’

In order to negate the modality, in most cases *may42* is placed in the position prior to the modal, as shown in (14). However, this does not apply to the case where it co-occurs with the modal *daay42*. In this case, it occurs in the position posterior to the modal, as shown in (15):

- (14) *thaa33nii33 may42 khuan33 soŋ22 raay33ŋaan33 phruŋ42nii45*  
 Thani NEG MOD hand in report tomorrow  
 ‘Thani should not hand in his report tomorrow.’

- (15) (i) *thaa33nii33 soŋ22 raay33ŋaan33 may42 daay42 phruŋ42nii45*  
 Thani hand in report NEG MOD tomorrow  
 ‘Thani is not able to hand in his report tomorrow.’  
 (ii) *thaa33nii33 soŋ22 raay33ŋaan33 phruŋ42nii45 may42 daay42*  
 Thani hand in report tomorrow NEG MOD  
 ‘Thani is not permitted to hand in his report tomorrow.’

### 1.3 SERIAL VERB CONSTRUCTIONS

Serial verb constructions are prominent in Thai. A serial verb construction is composed of more than one verb phrase. These verb phrases are combined in various kinds of constructions, which include passives, causatives, and control constructions. An example of a serial verb construction is shown in (16):

- (16) *rot45 chon33 ton42maay45 lom45*  
 car hit tree fall  
 ‘A/The car hit the tree and the tree fell.’

The serial verb construction above is composed of two verbs: *chon33* or ‘to hit’ and *lom45* or ‘to fall’. The initial verb, *chon33*, takes the argument *rot45* or ‘a/the car’ as the subject and the argument *ton42maay45* or ‘tree’ as the object. This part of the predicate narrates the

event in which a/the car hit the tree. The event resulted in the falling of the tree which calls for the addition of the final verb, *lom45* or 'to fall', which takes *ton42maay45* as its subject, to depict the result. As such, the serial verb construction in (16) displays both a causative and a resultative. It is aimed at emphasising the result of the action performed by the subject.

In addition to the serial verb construction shown in (16), which implies a causative and a resultative, Thepkanjana (1986), as well as Wilawan (1993), Muansuwan (2002) and Sudmuk (2005), have discussed other functions of serial verb constructions. These functions, as shown in (17), (18), and (19), include the expression of direction and aspect and indicate simultaneous actions.

- (17) *thaa33nii33 dæn33 won33 rɔp42 baan42*  
 Thani walk circle around house  
 'Thani walked around the house in a circle.'

The serial verb construction in (17) indicates both the motion of the subject and its direction. The second verb *won33* or 'to circle' suggests that the first verb *dæn33* or 'to walk', which is a motion verb, is performed by the subject Thani all the way around the house.

- (18) *naam45 rɔn45 khun42*  
 water hot ascend  
 'The water is getting hotter.'

(18) is composed of the initial verb *rɔn45* or 'to be hot' and the final verb *khun42* or 'to ascend'. Both verbs have the same subject, that is, *naam45* or 'the water'. The directional verb *khun42* denotes the inchoative aspect of the event which is caused by the initial verb *rɔn45*. It suggests that the temperature of the water is rising.

- (19) *thaa33nii33 dæn33 yim45 yaaŋ22mii33khwaam33suk22*  
 Thani walk smile happily  
 'Thani smiled happily while walking.'

The sentence in (19) exemplifies simultaneous serial verbs. The first verb *dəən33* or 'to walk' and the second verb *yim45* or 'to smile' are performed simultaneously by the same subject *Thani*.

#### 1.4 DEFINITENESS

Definiteness in Thai is not necessarily marked via articles as in English, nor is it marked through the use of morphological devices. Instead, it is marked through the addition of words or the use of the constructions that contain indefinite and definite meanings. Examples of indefinite implication are given in (20) and (21). Example (20) conveys the indefinite feature of durian through the addition of *nay24nay24*, which means 'any' and denotes the indefinite property of the noun *thu45rian33* or 'durian'. The use of the existential construction in (21) suggests the indefinite feature of the fruit.

(20) *thu45rian33 luuk42 nay24nay24 kɔɔ42 waan24 thaŋ45nan45*  
 durian CLASS any PART be sweet all  
 'All durians are sweet.'

(21) *mii33 thu45rian33 luuk42 nɯŋ22 waan33 yuu22 bon33 to45*  
 have durian CLASS one lie PROG on table  
 'There is a durian on the table.'

The definite feature of a noun phrase can be expressed via the use of the form demonstrative + classifier and the relative clause construction, as exhibited in (22) and (23).

(22) *thu45rian33 luuk42 nan45 waan24 maak42*  
 durian CLASS DEM be sweet a lot  
 'That durian is very sweet.'

(23) *thu45rian33 thi42 su22nan33 sɯu45 maa33 waan24 maak42*  
 durian REL Sunan buy come be sweet a lot  
 'The durian that Sunan bought is very sweet.'

Despite the availability of some particular words, forms, and sentence construction, definiteness is not always overtly denoted. The expression of it can be covertly accomplished through common ground knowledge and context. The noun phrase in a case like this appears in a bare form. An example is provided in (24):

- (24) `thu45rian33 waan24 maak42`  
       durian        be sweet a lot  
       ‘Durian (in general)/The durian is very sweet.’

In this case, the interpretation of a particular noun phrase as to whether it is definite or generic also depends on the common ground knowledge and context. Variation in interpretation can be observed in this case. The sentence in (24) can be uttered both in the context in which the noun phrase *durian* is generic or in the context where it is definite. Two example contexts are provided in (25) and (26):

- (25) Context: Generally, durian is a very sweet fruit and those who eat it know this fact. Danai has an English visitor who does not have any idea about durian. Danai explains the taste of the fruit:

Danai: `thu45rian33 waan24 maak42`  
       durian        be sweet a lot  
       ‘Durian (in general) is very sweet.’

- (26) Context: Sunan bought Danai a pack of durian. It is of a special variety which is relatively sweet. Danai has tasted the fruit and now wants to inform Sunan how it tastes.

Danai: `thu45rian33 waan24 maak42`  
       durian        be sweet a lot  
       ‘The durian (that you bought me) is very sweet.’

In the sentence in (25) which leads to a generic interpretation, the fact that the knowledge about the fruit is not mutually shared by both interlocutors does not obstruct their conversation. On the other hand, in (26) in order to interpret Danai's



utterance correctly, Sunan has to recognise that the durian being discussed refers to the durian that she bought for Danai. This suggests that the absence of the durian under discussion in the common ground would certainly cause a misunderstanding in the conversation.

The expression and interpretation of definiteness in Thai also introduce some crucial effects on the use of *lɛɛw45*, which will be discussed later in Chapters 4 and 7.

### 1.5 INFORMATION STRUCTURE

Thai is considered a topic-prominent language like Mandarin Chinese and Japanese. The subject of a sentence is normally assumed to function as the topic of the sentence while the predicate acts as the comment which offers some information concerning the topic. (27) is one example:

- (27) da33nay33 mii33 maa24 saam24 tua33  
 Danai have dog three CLASS  
 ‘Danai has three dogs.’

The above sentence discusses Danai, who is the subject of the sentence and the topic of the discussion. The remaining parts of the sentence depict a piece of information about Danai, regarding his ownership of dogs, which is a comment about him.

Even though the SVO order is likely to suggest the identification of topic and comment, topicalisation is carried out overtly via both the addition of the so-called topic particles and the shifting of word order. In (28), the topic of the discussion is identified by the particle *na22*, which is placed in a position posterior to the topic, which in this case is also the subject of the sentence.

- (28) da33nay33 na22 chɔɔp42 thu45rian33 maak42  
 durian PART Danai like a lot  
 ‘Danai likes durian a lot.’

The topic of a discussion can be signalled by raising it to the initial position of the sentence as exemplified in (29). Also, there are cases in which it is lowered to the final position of the sentence, as shown in (30). The particle *na22* can either be

present or absent in both examples.

(29) naŋ<sup>24</sup>suu<sup>24</sup> ləm<sup>42</sup> nii<sup>45</sup> (na<sup>22</sup>) da<sup>33</sup>nay<sup>33</sup> chɔɔp<sup>42</sup> maak<sup>42</sup>  
 book CLASS DEM (PART) Danai like a lot  
 ‘This book, Danai likes it a lot.’

(30) da<sup>33</sup>nay<sup>33</sup> chɔɔp<sup>42</sup> maak<sup>42</sup> naŋ<sup>24</sup>suu<sup>24</sup> ləm<sup>42</sup> nii<sup>45</sup> (na<sup>22</sup>)  
 Danai like a lot book CLASS DEM (PART)  
 ‘Danai likes it a lot, this book.’

Some particles, however, do not appear to mark an ordinary topic. They mark a contrastive topic which, following Lee's (2006) concept of contrastive topic, is supposed to eliminate the other relevant topics from the ongoing discourse. This can be observed in (31), where the particle *suan<sup>22</sup>*, which means 'as for', suggests that this discussion involves the accommodations, not the tickets or other things that the two people are preparing for their trip.

(31) Context: Danai and Thani are preparing things for their trip to Phuket. They are discussing the flight tickets and accommodation.

Danai: chan<sup>24</sup> ca<sup>22</sup> cɔɔŋ<sup>33</sup> tua<sup>24</sup> khruaŋ<sup>42</sup>bin<sup>33</sup>  
 I FUT book ticket plane  
 ‘I'll book the flight tickets.’

Thani: suan<sup>22</sup> thii<sup>42</sup>phak<sup>45</sup> chan<sup>24</sup> cɔɔŋ<sup>33</sup> ʔeeŋ<sup>33</sup>  
 as for accommodation I book oneself  
 ‘As for the accommodations, I'll book them.’

Focus marking is not obligatory; the marking is via some focus particles which are normally placed adjacent to the focused element. Thani's utterance in (32) exemplifies the focus marking via the particle *ʔa<sup>22</sup>*, as shown. However, in many cases in everyday language the focused element is left unmarked, as seen in (33):

(32) Danai: thu45rian33 thii42 chan24 suu45 hay42 pen33 yaŋ33ŋay33  
 durian REL I buy give COP how  
 ‘How was the durian I bought you yesterday?’

Thani: ʔa22rɔɔy22 maak42 ʔa22  
 delicious a lot PART  
 ‘Very delicious.’

(33) Danai: ca22 pay33 phuu33ket22 mua42ray22  
 FUT go Phuket when  
 ‘When will you go to Phuket?’

Thani: phruŋ42nii45  
 tomorrow  
 ‘Tomorrow.’

In many cases, (27) for instance, focus identification is carried out with the reliance on common ground knowledge and context. Such cases cause difficulties in the production and interpretation of an utterance. The interrelation of focus, common ground, and context is one of the fundamental issues in Chapter 7.

Even though there have been attempts to categorise topic and focus particles (Ekniyom 1982, for instance), it is still not clear if these particles perform a single function. Consider the function of the particle ʔa22 in (34). The particle can be placed adjacent to both the topic and the focus of the sentence.

(34) Sunan: phuu33ket22 pen33 yaŋ33ŋay33 baŋ42  
 Phuket COP how PART  
 ‘How was Phuket?’

Danai: (i) phuu33ket22 ʔa22 rɔɔn45 maak42 (preposed topic)  
 Phuket PART be hot a lot  
 ‘Phuket, it's very hot there.’

(ii) rɔɔn45 maak42 phuu33ket22 ʔa22 (postposed topic)  
 be hot a lot Phuket PART  
 ‘It's very hot there, Phuket.’

- (iii) rɔɔn45 maak42 ʔa22 (focus as an answer to the general question)  
 be hot a lot PART  
 ‘It's very hot there.’

The issues concerning topicalisation and focalisation and the roles of topic and focus particles are not directly relevant to the current study. Only the effects of focus on the interpretation of a sentence will be investigated in the current study.

## 1.6 CONCLUSION

This chapter has presented some basic information about Thai concerning both its phonological system and sentence constructions. This brief introduction to the language aimed at providing some guidance for readers when coming across example sentences which have been collected from the everyday Thai language. Moreover, this chapter addressed the issue of the serial verb constructions, which are common in the language, plus definiteness and information structure. These last two final issues are highly relevant to the investigations carried out in the current study.

## Chapter 2

### Aspectual Reference in Thai

The current study investigates the role and meaning of the particle *lɛɛw45*, which has been considered a perfective aspect marker. However, there is evidence from present day Thai that challenges this status of *lɛɛw45* in temporality. One of the most convincing pieces of evidence lies in the use of the unmarked alternative, which denotes the same temporal properties as *lɛɛw45*. The sentences in (35) and (36) show that both the unmarked alternative and the alternative marked with *lɛɛw45* denote the termination and the perfective aspect of the event.

(35) thaa33nii33 ʔaan22 raay33ɲaan33 set22  
Thani read report finish  
‘Thani finished reading the report.’

(36) thaa33nii33 ʔaan22 raay33ɲaan33 set22 lɛɛw45  
Thani read report finish PART  
‘Thani finished reading the report.’

In order to reappraise the function of *lɛɛw45*, it is crucial to review, first of all, aspectual reference in Thai. This chapter will thus offer some discussions concerning how aspect is referred to in the language which are based on the findings from past studies. These discussions are offered in Section 2.1. In addition, some basic information about the connotation of aspect through the use of aspect markers, both individually and in combination, and some other linguistic devices, is provided in Sections 2.2 and 2.3. This information is a platform for reviewing the role of *lɛɛw45*, as suggested in the past literature, which will be presented in Chapter 3; arguments against the conventional claims are proposed in Chapter 4.

#### 2.1 ASPECTUAL REFERENCE

Regarding temporality, in Thai neither verb inflections nor auxiliaries are available as devices to convey temporal concepts. Rather, time phrases, aspect markers, and contexts serve as clues to signal either present, past, or future time. These devices have syntactic functions as pre-serial verbs, auxiliaries, post-serial verbs, or particles. They also have

semantic functions as indicators of time and indicators of aspect. These linguistic devices are not obligatory. In natural speech, a sentence in Thai, without any specific time markers, is capable of being understood in any phase of time (Chaiyaratana, 1961:188). An example is presented in (37):

- (37) fon24 tok22  
rain fall  
'It is raining/It rained.'

The sentence can be interpreted either as 'It is raining' or 'It rained'. The sentence contains ambiguities both in terms of time reference and aspect. The interpretation can be carried out smoothly with the addition of a facilitator, as shown in (38). The temporal expression *mua42waan33nii45*, or 'yesterday', suggests that the event depicted refers to the time *yesterday*, which cooperates with the predicate and hints at the termination of the event.

- (38) mua42waan33nii45 fon24 tok22  
yesterday rain fall  
'It rained yesterday.'

According to Smyth (2002), in Thai, if it is deemed necessary, time can be normally referred to by the addition of time expressions and adverbials, as shown in (39) and (40):

- (39) sin24khaa45 maa33thun24 phrun42nii45  
goods arrive tomorrow  
'Goods will arrive tomorrow.'

- (40) khaw24 pay33 lon33don33 saam24 wan33 koon22  
he go London three day ago  
'He went to London three days ago.'

Each of the two sentences above gives a single reading. The addition of the time expression *phrun42nii45* 'tomorrow' in (39) generates a future reading, while the addition of the time adverbial *saam24 wan33 koon22*, or 'three days ago', in (40) generates a past

reading. The semantic time of the action *maa33thɯŋ24* 'to arrive' in (39) is automatically perceived to be subsequent to the time of utterance due to the future time expression *phruŋ42nii45*. In (40), the time adverbial *saam24 wan33 kɔɔn22* represents past time and suggests that the action *pay33* – 'to go' – happened prior to the time of utterance/reference.

Thai is an aspect-prominent language and aspect is marked in various ways. According to past literature, aspects are denoted by aspect markers, which are added into the sentences. Generally, aspect markers are projected syntactically in pre-serial and post-serial positions to the main verbs (Koenig and Muansuwan 2005), as shown in (41) and (42):

(41) *khaw24 kam33lan33 waat42 ruup42*  
 he ASP draw picture  
 'He is drawing a picture.'

(42) *baan42 phan33 lɛɛw45*  
 house collapse ASP  
 'The house collapsed.'

Koenig and Muansuwan classified aspect markers into two groups in accordance with their syntactic positions and semantic attributes, as shown in Table 6.

Syntactic positions		Semantic attributes	
Pre-serial position	Post-serial position	Perfective aspect	Imperfective aspect
<i>kam33lan33</i>	<i>yuu22</i>	<i>daay42</i>	<i>kam33lan33</i>
<i>daay42</i>	<i>lɛɛw45</i>	<i>lɛɛw45</i>	<i>yuu22</i>

TABLE 6. Classification of Thai aspect markers

Apart from the addition of aspect markers, Kullavanijaya and Bisang (2004) have found that aspects can be referred to in Thai via some strategies in which other kinds of linguistic devices are adopted. These strategies include the uses of directional verbs, resultative verbs, quantified arguments, phrasal verbs, and additional terminal markers.

## DIRECTIONAL VERB STRATEGY

The presence of the directional verbs *khun42* and *lon33* in (43) and (44) respectively in the position posterior to the stative main verbs denotes the inchoative aspect of the predicate.

(43) ʔaa33kaat33 rɔɔn45 khun42  
 weather hot up  
 ‘The weather is getting hot.’

(44) ʔaa33kaat33 yen33 lon33  
 weather cold down  
 ‘The weather is getting cold.’

## RESULTATIVE VERB STRATEGY

When added to predicates with action verbs, resultative verbs such as *ʔim22*, or 'be full', and *ʔɔɔk22*, or 'be out', suggest the termination of the event and the resultative state caused by the termination. This is shown in (45) and (46):

(45) khaw24 kin33 ʔim22  
 he eat full  
 ‘He ate until full.’

(46) khaw24 khit45 ʔɔɔk22  
 he think out  
 ‘He got a solution.’

## QUANTIFIED ARGUMENT STRATEGY

When functioning as an argument in a predicate with an action verb as a main verb, a quantified phrase, apart from quantification, indicates the termination of the event, as exemplified in (47):



- (47) khaw24 khian24 cot22maay24 saam24 cha22bap22  
 he write letter three CLASS  
 ‘He wrote three letters.’

#### PHRASAL VERB STRATEGY

(48) exemplifies that when phrasal verbs like *rəəm42*, which means ‘to start’, co-occur with a stative main verb, they denote an inceptive state.

- (48) ʔaa33kaat33 rəəm42 yen33  
 weather start cold  
 ‘The weather is getting cold.’

#### ADDITIONAL TERMINAL MARKERS

The termination of an event can be indicated with the presence of terminal markers such as *cop22* ‘to end’ and *set22* ‘to finish’, as shown in (49) and (50):

- (49) khaw24 ʔaan22 ni45yaay33 cop22  
 he read novel end  
 ‘He finished reading the novel.’

- (50) khaw24 tham33 ʔaa33haan24 set22  
 he do food finish  
 ‘He finished his cooking.’

## 2.2 PAST STUDIES ON ASPECTUAL REFERENCE IN THAI

Aspect in Thai has interested many researchers that have carried out analyses in an attempt to find out how aspect is used in the language. In the early studies Thai aspect was explored with reliance on the tense system in English. These studies are categorised here as tense-based studies. Analyses of aspect, which are free from the English tense system, prevailed in later studies, which are classified here as aspect-based studies. The tense-based studies include the work of Upakit Silapasarn (1937), which followed the ideas of

the traditional school, and the studies by Rattanotayanon (1982), Koosamit (1983), and Soithurum (1985), which followed the ideas of Chomsky's (1965) Transformational Grammar and Corder's (1967) contrastive analysis framework. Boonyapatipark's (1983) and Kulavanijaya and Bisang's (2004) works, on the other hand, are aspect-based; they do not rely on the English tense system and investigate the operations of the aspect markers in different types of situations and states of affairs. Boonyapatipark's work is based on Vendler's (1967) classifications of verbs in accordance with the aspects they indicate, while Kulavanijaya and Bisang's work is based on the selection theory developed by Bickel (1997). The following sections will provide a discussion about these tense-based and aspect-based studies.

### 2.2.1 Tense-based studies

UPAKIT SILAPASARN (1937)

In his book, *The Grammar of Thai*, Upakit Silapasarn follows the ideas of the traditional school and proposes that in Thai temporality is referred to through tenses. He categorises these tenses into three main groups; namely simple tenses, perfect tenses, and combined tenses. Both simple tenses and perfect tenses are sub-divided into present, past, future, and neutral tense varieties. These classifications are based on different aspect markers which, under his proposal, are referred to as auxiliaries. They are shown in Table 7 below.

Simple tenses		Perfect tenses	
Tenses	Auxiliaries	Tenses	Auxiliaries
Present simple	<i>kam33lan33, yuu22</i>	Present perfect	<i>yuu22 + lɛɛw45</i>
Past simple	<i>daay42, kəəy33</i>	Past perfect	<i>daay42 + lɛɛw45</i>
Future simple	<i>ca22, cak22</i>	Future perfect	<i>ca22 + lɛɛw45</i>
Neutral simple	<i>yɔɔm42</i>	Neutral perfect	<i>lɛɛw45</i>

TABLE 7. Upakit Silapasarn's classifications of tenses

Some examples of the above tenses that are given by Upakit Silapasarn (1937:135) are restated in (51)-(58) below:

(51) Present simple tense:

khaw24 kam33laŋ33 nɔɔn33  
 he AUX sleep  
 ‘He is sleeping.’

(52) Past simple tense:

khaw24 daay42 maa33 thii42nii42  
 he AUX come here  
 ‘He came here.’

(53) Future simple tense:

khaw24 ca22 kin33  
 he AUX eat  
 ‘He will eat.’

(54) Neutral simple tense:

khon33 dii33 yɔɔm42 pra22phrut45 dii33  
 man good AUX behave good  
 ‘A good man behaves well.’

(55) Present perfect tense:

khaw24 nɔɔn33 yuu22 læw45  
 he sleep AUX AUX  
 ‘He is already sleeping.’

(56) Past perfect tense:

khaw24 daay42 nɔɔn33 læw45  
 he AUX sleep AUX  
 ‘He had slept.’

(57) Future perfect tense:  
 khaw24 ca22 tham33 lɛɛw45  
 he AUX do AUX  
 'He is going to do it.'

(58) Neutral perfect tense:  
 khaw24 nɔɔn33 lɛɛw45  
 he sleep AUX  
 'He slept.'

As for combined tenses, they represent the combinations of the above tenses. Two of the examples from Upakit Silapasarn's book (1937:136) are given in (59) and (60):

(59) waan33nii45 chan24 kam33laŋ33 kin33 khaw42  
 yesterday I AUX eat rice  
 'Yesterday I was having a meal.'

(60) khaw24 cak22 kam33laŋ33 kiaw22 khaw42  
 he AUX AUX harvest rice  
 'He will be harvesting the rice.'

Upakit Silapasarn explains that in (59), the present simple tense, which is marked by the auxiliary *kam33laŋ33*, combines with the past time denoted by the time expression *waan33nii33* or 'yesterday'. He calls this combination the present simple in the past. As for (60), the combination is called the present simple in the future.

In general, despite a reliance on the English tenses, Upakit Silapasarn's classifications of tenses do not completely correspond to the English tenses, especially in the classes that contain combinations of auxiliaries. The terms he uses to describe these tenses are derived from the tense that each auxiliary is supposed to originally represent. The incompatibility between the true temporal meanings of the predicates and the tenses that describe them can be detected from the present perfect tense represented in (55) and the future perfect tense represented in (57). These drawbacks of Upakit Silapasarn's classifications of tenses and auxiliaries were caused by the lack of thorough analyses of the functions of each auxiliary.

RATTANOTAYANON (1982), KOOSAMIT (1983), AND SOITHURUM (1985)

The studies on aspectual reference in Thai that are based on Chomsky's (1965) transformational grammar include those of Rattanutayanon (1982), Koosamit (1983), and Soithurum (1985). Apart from this syntactic theory, these studies followed the model of contrastive analysis proposed by Corder (1967). Unlike Upakit Silapasarn, these three researchers used the term aspect marker, instead of auxiliary. They examined the surface structure, the deep structure, and the transformational rules in order to offer explanations on the references to the present, the past, and the future times in Thai, while at the same time comparing them to those in the English language. Relying on the tense system, they all claimed that the expressions of time in both languages have similarities and differences both at the semantic and syntactic levels, especially in terms of their deep structure and transformational rules. Moreover, at the surface level, time reference in English is carried out through syntactic and morphological devices, while time in Thai is referred to only syntactically.

Comparing the meanings of the present tense in both languages, Rattanutayanon (1982) proposed that the present tense in Thai shares some meanings with the English present tense. These include factive meaning, habitual meaning, progressive meaning, and perfect meaning with a result in the present. However, while the English present tense; namely, the present perfect tense, additionally denotes the recent termination of an event and depicts the event that took place sometime in the past, the present tense in Thai does not convey these meanings.

Regarding past time references in Thai and English, according to Koosamit (1983), although there are some similarities, in general there are huge differences between them. In the two languages past tense conveys terminative, habitual, and continuous meanings. However, in Thai, past tense does not suggest the meanings that the English past perfect, past perfect continuous, or present continuous tenses convey. In other words, these tenses are not available in Thai. In addition, in Thai, past tense appears to suggest some extra meanings apart from the termination of the event. These extra meanings include past prospective, past volitive, and past experiential. Past prospective depicts the past event plus the prospectiveness of the event or the anticipation that the event would happen in the past. Past volitive suggests the volativeness or intention of the subject to perform the event in the past while past experiential suggests that the subject has at one point performed the event. Koosamit's (1983:62) examples for these extra meanings of the

past tense in Thai are provided in (61)-(63):

(61) Prospective (with *kɔɔ42 + ca22*):

laaŋ24caak22 phuut42 set22 khaw24 kɔɔ42 ca22 thak45thaay33 phuu42faŋ33  
 after speak finish he PAR ASP greet audience  
 ‘After he finished his speech he would always greet the audience.’

(62) Volative (with *ca22 + yu22 + lɛɛw45*):

mua42chaw45nii45 khaw24 ca22 pay33 yuu22 lɛɛw45  
 this morning he ASP go ASP ASP  
 ‘He was about to go this morning.’

(63) Experiential (with *khəəy33*):

khaw24 khəəy33 pay33 soŋ24khlaa24  
 he ASP go Songkla  
 ‘He has been to Songkla/He used to go to Songkla.’

Examining the future tense in Thai, Soithurum (1985) proposes that it is similar to the English future tense in that it offers the meanings of future factive and future prospective (scheduled). Nonetheless, like the past tense, which conveys some extra meanings as claimed by Koosamit, Thai future tense also offers some other meanings; namely, future volitive, future predictive, future volitive/immediacy of action, future predictive/immediacy of action, and future prospective/immediacy of action. Soithurum's (1985:32-33) examples are provided in (64)-(68):

(64) Future volitive (with *ca22*):

chan24 ca22 pay33 phuu33ket22 (phruŋ42nii45)  
 I ASP go Phuket (tomorrow)  
 ‘I will go to Phuket (tomorrow).’

(65) Future predictive (with *ca22*):

khaw24 ca22 pay33 phuu33ket22 (phruŋ42nii45)  
 he ASP go Phuket (tomorrow)  
 ‘(the speaker predicts that) He will go to Phuket (tomorrow).’

- (66) Future volitive/immediacy of action (with *ca22* + *lɛw45* + first person subject)  
 chan24 ca22 pay33 pjuu33ket22 lɛw45 (ʔiik22may42naan33nii45)  
 I ASP go Phuket ASP (very soon)  
 ‘I am going to Phuket (very soon).’
- (67) Future predictive/immediacy of action (with *ca22* + *lɛw45*)  
 khaw24 ca22 pay33 phuu33ket22 lɛw45 (ʔiik22may42naan33nii45)  
 he ASP go Phuket ASP (very soon)  
 ‘(the speaker predicts that) He is going to Phuket (very soon).’
- (68) Future prospective/immediacy of action (with *kam33lan33* + *ca22* + *lɛw45*)  
 khaw24 kam33lan33 ca22 pay33 phuu33ket22 lɛw45  
 he ASP ASP go Phuket ASP  
 (nay33may42kii22naa33thii33)  
 (in a few minutes)  
 ‘(the speaker is certain that) He is going to Phuket (in a few minutes).’

The three studies above not only investigated the occurrence of aspect markers in different occasions but also thoroughly examined the meanings that each marker or each combination gives. However, some meanings, especially those unavailable in English tenses, are not displayed in a clear way. This is possibly due to the lack of contexts. Also, with different contexts the meanings might not be as the studies claim. Two crucial points that the three studies did not address were the true semantic properties of the markers and how each marker operates both when it stands alone and when it co-occurs with other marker(s).

### 2.2.2 Aspect-based studies

BOONYAPATIPARK (1983)

Boonyapatipark's (1983) study was a pioneering study that explored aspect in the Thai language without any reference to the tense system. Her main aim was to investigate the functions of *kam33lan33*, *yan33*, *yuu22*, *lɛw45*, *khəəy33*, and *ca22*, all of which are referred to in her study as aspect markers. Boonyapatipark based her investigation on the

definition of aspect proposed by Comrie (1976), which proposed that aspect is referred to as the internal part of a situation. She also followed Lyon's (1977) idea of aspect, which indicated that aspect manifestation is dependent upon the time of utterance. Moreover, in order to thoroughly examine the functions of the aforementioned aspect markers when occurring with verbs from different categories, Boonyapatipark applied Vendler's (1967) classifications of lexical aspects, which represent the type of situation that a particular verb expresses.

According to Boonyapatipark, verbs in Thai can be classified into three categories: 1) verbs that indicate states; 2) verbs that indicate dynamic situations; and 3) verbs that indicate either a dynamic situation or a state which is a result of the termination of a dynamic situation. She subdivides the stative verbs into verbs that indicate permanent states and verbs that indicate temporary states. The second category, which comprises verbs that indicate dynamic situations, is subdivided into verbs that indicate processes and verbs that indicate events. The former subcategory, verbs that indicate processes, is further classified into verbs that denote accomplishments and verbs that denote non-accomplishments. Moreover, Boonyapatipark further classified verbs that indicate events into other two classifications; namely, verbs that denote achievement events and verbs that denote momentary events. All of these classifications are summarised in Table 8 below:

States		Dynamic situations				Result state/ Dynamic situation
Permanent	Temporary	Processes		Events		
		Accomplishments	Non- accomplishments	Achievement	Momentary	

TABLE 8. Boonyapatipark's classifications of verbs in Thai

Regarding the aspect markers in her investigation, Boonyapatipark proposed that syntactically the aspect markers *yaŋ33*, *yuu22*, *leɛw45*, and *khəəy33* were once used as main verbs. Their later status as an auxiliary has been derived due to grammaticalisation. Semantically, the meanings and uses of all aspect markers are dependent upon the types of verbs with which they co-occur. Some of the examples given by Boonyapatipark are provided in (69)-(74):



- (69) *kam33laŋ33* (marker of progressive aspect)
- (i) With verbs indicating non-accomplishments
- khaw24 kam33laŋ33 ʔaan22 naŋ24suu24  
 he PROG read book  
 ‘He is reading.’ (1983:69)
- (ii) With verbs indicating achievements
- khon33ŋaan33 kam33laŋ33 lək42 ŋaan33  
 worker PROG stop work  
 ‘The workers are stopping their work (i.e. some have stopped and some are about to stop working).’ (1983:72)
- (70) *yuu22* (a continuative marker)
- (i) With verbs indicating momentary situations
- khaw24 kra22doot22 khaam42 rua45 yuu22  
 he jump over fence CONT  
 ‘He is jumping over the fence (again and again repeatedly, in other words, he keeps on jumping over the fence or fences).’ (1983:102)
- (ii) With verbs indicating temporary states
- khaw24 cep22 niu45 yuu22  
 he be hurt finger CONT  
 ‘His finger is hurting (implying that the feeling of the pain is continuing at the present).’ (1983:104)
- (71) *yaŋ33* (a persistence marker which often appears in combination with *yuu22*)
- (i) With verbs indicating accomplishments
- khaw24 yaŋ33 tat22sin24chay33 yuu22  
 he PERS decide CONT  
 ‘He is still making up his mind.’ (1983:137)

- (ii) With verbs indicating permanent states  
 nit45 yaŋ33 suay24 yuu22  
 Nid PERS be pretty CONT  
 ‘Nid is still pretty.’ (1983:140)

(72) *lɛw45* (marker of perfectivity)

- (i) With verbs indicating accomplishments  
 khaw24 tat22sin24chay33 lɛw45  
 he decide PERF  
 ‘He has made up his mind.’ (1983:165)

- (ii) With verbs indicating temporary states  
 khaw24 hiu24 lɛw45  
 he be hungry PERF  
 ‘He is hungry now.’ (1983:167)

(73) *khəəy33* (experiential marker)

- (i) With verbs indicating non-accomplishments  
 khaw24 khəəy33 nɔɔn33 baan42 nii45  
 he EXP sleep house this  
 ‘He has slept in this house before.’ (1983:198)

- (ii) With verbs indicating temporary states  
 khaw24 khəəy33 kroot22 nit45  
 he EXP be angry Nid  
 ‘He has been angry with Nid before.’ (1983:201)

(74) *ca22* (prospective marker)

- (i) With verbs indicating non-accomplishments  
 khaw24 ca22 duu33 thoo33ra33that45  
 he PROS watch television  
 ‘He is going to watch television.’ (1983:221)

- (ii) With verbs indicating permanent states  
 khaw24 ca22 ruay33 nɛɛ42  
 he PROS be rich certainly  
 ‘He will certainly be rich.’ (1983:223)

KULAVANIJAYA AND BISANG (2004)

The study of Thai aspect carried out by Kulavanajaya and Bisang (2004) followed Bickel's (1997) selection-theory of aspect, according to which aspect markers act as the operators that map the temporal structures inherited in the states of affairs to the temporal boundaries that allow them to take place. While Boonyapatipark's work investigates aspect markers and the types of verbs they co-occur with, Kulavanijaya and Bisang's study examines aspect markers and the temporal semantics of their co-occurring states of affairs. Temporal semantics is determined either by lexical aspects inherent in the verbs or temporal boundaries. The study basically proposes that each aspect marker selects a particular state of affairs in which it operates. In addition, the properties of each aspect marker are supposed to correspond to the temporal semantics of the state of affairs selected.

Regarding states of affairs, this study follows both the concepts of verb classes proposed by Vendler (1967) and Dowty (1979) and the system developed by Breu (1985, 2000) and Sasse (1991, 2002). The combination postulates five classes of verbs and states of affairs that are used in the study. They are shown in (75):

- (75) (i) States or Totally Stative refer only to the situation and have no temporal boundaries.
- (ii) Activities or Action refer to a state of affairs that comprises an initial boundary, a situation, or a terminal boundary.
- (iii) Accomplishments or Gradually Terminative refer to a situation plus a terminal boundary.
- (iv) Achievements of Totally Terminative refer to a state of affairs in which the initial and terminal boundaries collapse into one.
- (v) Inceptive-statives refer to a state of affairs with an initial boundary and a situation.

Kulavaniyaya and Bisang examined three aspect markers, *lɛɛw45*, *yuu22*, and *kam33lan33*, and propose that each selects some particular states of affairs. Some examples that exhibit the selections which were given in their paper are restated in (76)-(78):

(76) *lɛɛw45*

(i) With inceptive-stative states of affairs

phom24 rak45 thəə33 khaw42 lɛɛw45

I love she enter ASP

‘I have fallen in love with her (before I did not love her but now I do).’

(2004:24)

(ii) With totally terminative states of affairs

ŋaan33 set22 lɛɛw45

work finish ASP

‘The work is/was finished (end of the work is achieved).’ (2004:25)

(77) *yuu22*

(i) With totally stative states of affairs

khaw24 pen33 khruu33 yuu22

he be teacher ASP

‘He is a teacher (from the perspective of the speech act time he has been a teacher and continues to be a teacher. However, this state may not last forever).’ (2004:28)

(ii) With active states of affairs

khaw24 ʔaan22 naŋ24suu24 yuu22

he read book ASP

‘He is reading a book (the phase of his reading a book continues through time without reference to the initial and terminal boundaries of that state of affairs).’ (2004:29)

(78) *kam33laŋ33*

(i) With totally stative states of affairs

ʔaa33kaat22 kam33laŋ33 rɔn45

weather ASP hot

‘(at reference time) The weather is hot.’ (2004:32)

(ii) With gradually terminative states of affairs

khaw24 kam33laŋ33 phop45 way33rat45 tua33 may22

he ASP discover virus CLASS new

‘They are discovering a new virus (at reference time the process of discovering a new virus is going on aiming at the terminal point).’ (2004:33)

Focusing on aspect, both Boonyapatipark (1983) and Kulavaniyaya and Bisang (2004) offered some sensible explanations for the operation of aspect markers in Thai and how they are used to expressed aspect in the language. Making use of the English tense system, Upakit Silapasarn (1937), Rattanotayanon (1982), Koosanit (1983), and Soithurum (1985) did not successfully provide the reasons behind the similarities and differences between the temporal references of the two languages. They merely exhibited the patterns of occurrence of the aspect markers without suggesting any motivations behind these patterns. The aspect-based studies, even though some explanations are still sketchy, at least manage to provide a convincing proposal that the occurrence of aspect markers complies with the temporal semantics of the situation or the state of affairs in which they appear.

### 2.3 THE COMBINATIONS OF ASPECT MARKERS

Interestingly, in Thai, multiple aspect markers can co-occur in the same sentence. This section will present a discussion about the combinations of aspect markers addressed in the tense-based and aspect-based studies.

#### 2.3.1 Tense-based studies

In the tense-based studies, the combinations of aspect markers were not examined thoroughly in terms of the separation from the cases with individual aspect markers. Rather, based on the English tense system, they were categorised as tenses. The

combinations of aspect markers addressed in Upakit Silapasarn's (1937) book are presented in Table 9 below:

Combinations	Tenses
<i>kam33lan33 + yuu22</i>	Simple present
<i>yan33 + yuu22</i>	Simple present
<i>daay42 + lɛɛw4</i>	Past perfect
<i>ca22 + lɛɛw45</i>	Future perfect

TABLE 9. Upakit Silapasarn's combinations of auxiliaries

The examples given in the book are restated in (79)-(82) below:

(79) *kam33lan33 + yuu22* (simple present):

khaw24 kam33lan33 nɔɔn33 yuu22  
 he AUX sleep AUX  
 'He is sleeping.' (1937:135)

(80) *yan33 + yuu22* (simple present):

khaw24 yan33 nɔɔn33 yuu22  
 he AUX sleep AUX  
 'He is still sleeping.' (1937:135)

(81) *daay42 + lɛɛw45* (past perfect):

khaw24 daay42 nɔɔn33 lɛɛw45  
 he AUX sleep AUX  
 'He had slept.' (1937:135)

(82) *ca22 + lɛɛw45* (future perfect):

khaw24 ca22 tham33 lɛɛw45  
 he AUX do AUX  
 'He is going to do it.' (1937:135)

In Koosamit's (1983) work, the combinations of aspect markers cooperate with past time expressions in order to generate temporal meanings for the past events. The combinations are presented in Table 10 and the examples are given in (83)-(90).

Combinations	Meanings
<i>kam33lan33 + yuu2 + past time expression</i>	Past progressive
<i>kam33lan33 + ca22 + yuu22 + lεw45 + past time expression</i>	Past progressive and volitive
<i>ca22 + yuu22 + lεw45 + past time expression</i>	Past volitive
<i>daay42 + lεw45 + past time expression</i>	Past completive
<i>phəəŋ42 + ca22 + past time expression</i>	Past immediate completive
<i>khəəy33 + lεw45 + past time expression</i>	Past experiential
<i>phəəŋ42 + khəəy33 + past time expression</i>	Past immediate completive and experiential
<i>phəəŋ42 + ca22 + khəəy33 + past time expression</i>	Past immediate completive and experiential

TABLE 10. Koosamit's combinations of aspect markers

(83) *kam33lan33 + yuu2 + past time expression (past progressive)*

khaw24 kam33lan33 ʔaan22 naŋ24səu24 yuu22 (mua42 chua42moon  
 he ASP read book ASP (when hour  
 thii42lεw45)  
 last)

‘He was reading (an hour ago).’ (1983:64)

- (84) *kam33laŋ33 + ca22 + yuu22 + lɛw45 + past time expression (past progressive and volitive):*  
 khaw24 kam33laŋ33 ca22 kin33 khaw42 yuu22 lɛw45 (mua42  
 he ASP ASP eat rice ASP ASP (when  
 yen33waan33)  
 evening yesterday)  
 ‘He was going to eat dinner (yesterday evening).’ (1983:64)
- (85) *ca22 + yuu22 + lɛw45 + past time expression (past volitive):*  
 khaw24 ca22 pay33 yuu22 lɛw45 (mua42 chaw45nii45)  
 he ASP go ASP ASP (when this morning)  
 ‘He was about to go (this morning).’ (1983:64)
- (86) *daay42 + lɛw45 + past time expression (past completive):*  
 khaw24 daay42 tat22sin24chay33 thii42 ca22 phuut42 lɛw45  
 he ASP decide COMP ASP speak ASP  
 (mua42 yen22 waan33)  
 (when evening yesterday)  
 ‘He decided to speak (yesterday evening).’ (1983:64)
- (87) *phəəŋ42 + ca22 + past time expression (past immediate completive):*  
 khaw24 phəəŋ42 ca22 kin33 khaw42 (mua42 tɔn33baay22)  
 he ASP ASP eat rice (when afternoon)  
 ‘He has just had lunch (in the afternoon).’ (1983:64)
- (88) *khəəy33 + lɛw45 + past time expression (past experiential):*  
 khaw24 khəəy33 pay33 soŋ24khlaa24 lɛw45 (mua42 duan33 thii42lɛw45)  
 he ASP go Songkla ASP (when month last)  
 ‘He has been to Songkla (he went there last month).’ (1983:64)



- (89) *phəəŋ42 + khəəy33 + past time expression (past immediate completive and experiential)*

khaw24 phəəŋ42 khəəy33 pay33 mʉəŋ33nɔk42 (mʉa42 pii33  
 he ASP ASP go abroad (when year  
 thii42lɛw45)  
 last)

‘He has just been to Songkla (he went there last year and it was his first time).’  
 (1983:64)

- (90) *phəəŋ42 + ca22 + khəəy33 + past time expression (past immediate completive and experiential):*

khaw24 phəəŋ42 ca22 khəəy33 pay33 mʉəŋ33nɔk42 (mʉa42 pii33  
 he ASP ASP ASP go abroad (when year  
 thii42lɛw45)  
 last)

‘He has just been to Songkla (he went there last year and it was his first time).’  
 (1983:64)

Soithurum (1985) proposes that there are also combinations of aspect markers for future time reference. These combinations and their meanings are summarised in Table 11 and the examples are restated in (91)-(94).

Combinations	Meanings
kam33lɔŋ33 + ca22	Future prospective
ca22 + lɛw45 + first person subject	Future volitive/immediacy of action
ca22 + lɛw45	Future predictive/immediacy of action
kam33lɔŋ33 + ca22 + lɛw45	Future prospective/immediacy of action

TABLE 11. Soithurum's combinations of aspect markers

- (91) *kam33laŋ33 + ca22* (future prospective):  
 khaw24 kam33laŋ33 ca22 pay33 phuu33ket22 (yen33nii45)  
 he ASP ASP go Phuket (this evening)  
 'He is going to Phuket (this evening).' (1985:32)
- (92) *ca22 + lɛɛw45* + first person subject (future volitive/immediacy of action):  
 chan24 ca22 pay33 phuu33ket22 lɛɛw45 (ʔiik22may42naan33nii45)  
 I ASP go Phuket ASP (very soon)  
 'I am going to Phuket (very soon).' (1985:32)
- (93) *ca22 + lɛɛw45* (future predictive/immediacy of action):  
 khaw24 ca22 pay33 phuu33ket22 lɛɛw45 (ʔiik22may42naan33nii45)  
 he ASP go Phuket ASP (very soon)  
 '(the speaker predicts that) He is going to Phuket (very soon).' (1985:33)
- (94) *kam33laŋ33 + ca22 + lɛɛw45* (future prospective/immediacy of action):  
 khaw24 kam33laŋ33 ca22 pay33 phuu33ket22 lɛɛw45  
 he ASP ASP go Phuket ASP  
 (nay33may42kii22naa33thii33)  
 (in a few minutes)  
 '(the speaker is certain that) He is going to Phuket (in a few minutes).'
- (1985:33)

### 2.3.2 Aspect-based studies

BOONYAPATIPARK (1983)

Without any dependence on the English tense system, Boonyapatipark (1983) discusses the combinations of aspect markers in three main forms; namely, the combination of imperfective aspect markers, the combination of *lɛɛw45* with imperfective aspect markers, and the combination of *khəəy33* with imperfective aspect markers and *lɛɛw45*. As the focus of the current study is the operation of *lɛɛw45*, the combination of imperfective aspect markers will not be addressed in this section.

Boonyapatipark investigates the combination of the perfective aspect marker *lɛɛw45* and the three imperfective aspect markers, *kam33lan33*, *yan33* and *yuu22*. She claims that when *yuu22* and *lɛɛw45* co-occur, they denote the continuity of the situation at the reference or utterance time. The combined marker offers an implication that the continuity has lasted for some time. An example of this combination is restated in (95):

- (95) khaw24 tɔŋ42kaan33 rot45 yuu22 lɛɛw45  
 he want car CONT PERF  
 ‘He has been wanting a car for some time now.’ (1983:237)

Comparing the version with the combined *yuu22 lɛɛw45* in (95) with the versions using only *yuu22* and *lɛɛw45* in (96) and (97) respectively, Boonyapatipark proposes that the latter two do not yield the extra implication regarding the continuity of the situation. In (96), *yuu22* only indicates the desire for a car of the person at the reference or utterance time while in (97) *lɛɛw45* only refers to the desire as a new situation that did not exist before the reference or utterance time.

- (96) khaw24 tɔŋ42kaan33 rot45 yuu22  
 he want car CONT  
 ‘He wants a car (at the present).’ (1983:237)

- (97) khaw24 tɔŋ42kaan33 rot45 lɛɛw45  
 he want car PERF  
 ‘He wants a car now.’ (1983:238)

The co-occurrence of *lɛɛw45* and *kam33lan33*, according to Boonyapatipark, is acceptable but is not common in the language. However, she does not give any explanations for the interaction of the two markers.

Boonyapatipark claims that the co-occurrence of *kam33lan33*, *yuu22*, and *lɛɛw45* is also possible. The combined *kam33lan33...yuu22 lɛɛw45*, as shown in the quoted example in (98), is claimed to be similar to the combined *kam33lan33...yuu22* in that it also denotes the continuity of the situation at the reference or utterance time. The two combinations differ in that *kam33lan33...yuu22 lɛɛw45* additionally suggests the speaker's disapproval of something. In some contexts, it indicates the speaker's request for patience.

- (98) khaw<sup>24</sup> kam<sup>33</sup>lan<sup>33</sup> reŋ<sup>42</sup> ŋaan<sup>33</sup> yuu<sup>22</sup> lɛw<sup>45</sup>  
 he PROG speed up work CONT PERF  
 thəə<sup>33</sup> khuan<sup>33</sup> ot<sup>22</sup>thon<sup>33</sup> nɔy<sup>22</sup>  
 you should be patient a little  
 ‘He is already speeding up the work, you ought to be a bit more patient (in other words, do not push him too much).’ (1983:240)

Boonyapatipark briefly addresses the combination of *yan<sup>33</sup>* and *lɛw<sup>45</sup>*, saying that the two aspect markers are incompatible and never co-occur in the same clause.

The experiential *khəy<sup>33</sup>* can also combine with imperfective aspect markers. According to Boonyapatipark, this combination is possible only in a sentence that contains two clauses. *Khəy<sup>33</sup>* scopes over the clauses. The clause carrying the imperfective predicate sets a temporal frame for the occurrence of the situation represented in the other clause. In one of Boonyapatipark's examples quoted in (99), the predicate in the second clause, 'the teacher happened to walk into the room and saw it', is located in the temporal frame set by the predicate in the first clause, 'the person was in the middle of copying a friend's homework'. While the person was copying his friend's homework, the teacher walked into the room and saw the action. *Khəy<sup>33</sup>* scopes over the two predicates which represent the whole situation and suggest that the person has experienced this kind of situation.

- (99) khaw<sup>24</sup> khəy<sup>33</sup> kam<sup>33</sup>lan<sup>33</sup> lək<sup>42</sup> kaan<sup>33</sup>baan<sup>42</sup> phuan<sup>42</sup> yuu<sup>22</sup> lɛ<sup>45</sup>  
 he EXP PROG copy homework friend CONT and  
 khruu<sup>33</sup> dən<sup>33</sup> maa<sup>33</sup> hen<sup>24</sup> phɔɔ<sup>33</sup>dii<sup>33</sup>  
 teacher walk come see just  
 ‘He has had the experience of being in the middle of copying a friend's homework and the teacher happened to walk into the room and saw it (how unfortunate he was and he was punished for that).’ (1983:242)

The last pattern of combination addressed by Boonyapatipark was the combination of *khəy<sup>33</sup>* and *lɛw<sup>45</sup>*, which is claimed to be very common in the language. Giving a minimal pair as an example, Boonyapatipark, as shown in (100) and (101), points out that the meaning of *khəy<sup>33</sup>...lɛw<sup>45</sup>* is quite similar to the meaning of the isolated *khəy<sup>33</sup>*; the difference merely lies in the extra implication offered by the combined *khəy<sup>33</sup>...lɛw<sup>45</sup>*,

which is the emphasis that the experience represented in the situation has already taken place. This emphasis is attributed to the influence of *lɛɛw45*.

(100) khaw24 khəəy33 pay33 ʔa22mee33ri45kaa33  
 he EXP go America  
 ‘He has been to America.’ (1983:242)

(101) khaw24 khəəy33 pay33 ʔa22mee33ri45kaa33 lɛɛw45  
 he EXP go America PERF  
 ‘He has been to America.’ (1983:243)

Boonyapatipark further points out that the combination of *khəəy33* and *lɛɛw45* also suggests some other implications. One of her examples is quoted in (102) below:

(102) chan24 khəəy33 pay33 ʔa22mee33ri45kaa33 lɛɛw45  
 I EXP go America PERF  
 may42 pay33 rɔk22  
 NEG go PART  
 ‘I have been to America before and don't want to go this time.’ (1983:244)

In this example, according to Boonyapatipark, *lɛɛw45* not only hints that the person has had the experience, which is, in this case, the experience of travelling to America; it also sets the situation represented in the clause in which it appears as the background and links it to the other situation represented in the other clause. Accordingly, in the case of (102), the background, which is represented in the clause with *lɛɛw45*, is that the person has been to America. It relates to the situation represented in the second clause in the sense that it is the reason why the person does not want to go to America this time.

Boonyapatipark does not carry out any thorough investigations into the role of *lɛɛw45* in this pattern of combination. She only points out that Thai native speakers seem to be very consistent when choosing between the alternative with *khəəy33* and the alternative with *khəəy33...lɛɛw45*. At the end of the section she suggests that further investigations into this combination, as well as other combinations of aspect markers, needed to be carried out.

The compatibility and incompatibility of the co-occurrences of aspect markers discussed by Boonyapatipark are summarised in Table 12:

<b>Combinations</b>	<b>Compatibility</b>	<b>Meanings</b>
<i>kam33lan33 + yuu22</i>	✓	accumulating/ongoing
<i>kam33lan33 + yuu22 + achievement</i>	✗	-
<i>kam33lan33 + yan33</i>	✓ / ✗	NA
<i>yan33 + yuu22</i>	✓	continuity/persistence
<i>yan33 + kam33lan33 + yuu22</i>	✓	continuity/persistence
<i>yuu22 + leew45</i>	✓	<b>continuity</b>
<i>kam33lan33 + leew45</i>	✓	NA
<i>kam33lan33 + yuu22 + leew45</i>	✓	<b>accumulating/continuity</b>
<i>yan33 + leew45</i>	✗	-
<i>khəay33 + kam33lan33 + yuu22</i>	✓	experience of the situation
<i>khəay33 + leew45</i>	✓	<b>experience of the situation</b>

TABLE 12. Boonyapatipark's combinations of aspect markers

KULLAVANIJAYA AND BISANG (2004)

According to selection theory, a state of affairs takes place in a temporal boundary that matches the temporal structure it inherits. Following this theory, Kullavanijaya and Bisang propose that the combinations of aspect markers need to match the states of affairs in which they appear. Given this, they provided three main rules for the general co-occurrences of aspect markers in Thai. The first rule is that, *kam33lan33* and *leew45* are never compatible whenever they operate on the same temporal unit. This is due to the characteristics of the two aspect markers. *Leew45* is used to refer to a point in time and thus denotes punctuality. On the other hand, *kam33lan33* is added to refer to a stretch of time and therefore denotes the persistence of the state of affairs at the reference time. The second rule involves the future marker *ca22*. Kullavanijaya and Bisang claimed that in a state of affairs in which *ca22* co-occurs with aspect markers, the compatibilities between or

among aspect markers never occur. This is because all aspect markers operate in association with the temporal boundary set by *ca22*—they do not have to establish the temporal boundaries of their own and thus do not clash with one another. This thus leads to the final rule, which states that the co-occurrence of more than two aspect markers is possible only with the presence of *ca22*.

Following the three rules that they offer, Kullavanijaya and Bisang presented both the compatible and incompatible combinations of aspect markers in each type of state of affairs as follows. In totally stative states of affairs as in (103), three patterns of combinations are allowed. These include the combinations progressive + continuative, continuative + *lɛɛw45*, and progressive + future marker *ca22* + continuative + *lɛɛw45*, which are shown in (104), (105), and (106), respectively.

(103) Totally stative states of affairs:

naam45 rɔɔn45  
 water hot  
 ‘The water is hot.’ (2004:35)

(104) Progressive + continuative:

naam45 kam33laŋ33 rɔɔn45 yuu22  
 water ASP hot ASP  
 ‘The water is being hot (now, but may be not so later).’ (2004:35)

(105) Continuative + *lɛɛw45*:

naam45 rɔɔn45 yuu22 lɛɛw45  
 water hot ASP ASP  
 ‘The water is hot (it is already hot and no reheating is needed).’ (2004:35)

(106) Progressive + future marker *ca22* + continuative + *lɛɛw45*:

naam45 kam33laŋ33 ca22 rɔɔn45 yuu22 lɛɛw45  
 water ASP FUT hot ASP ASP  
 ‘The water is about to become hot.’ (2004:36)

The compatibility of the aspect markers in the combination in (106) is in accordance with the second rule involving the future marker *ca22*. In this case, the three aspect markers

operate in the temporal boundary established by the future marker *ca22*. *lɛɛw45*, moreover, indicates a change of state at the initial part of the future time boundary. In total statives, however, the combinations progressive + *lɛɛw45* and progressive + continuative + *lɛɛw45* are unacceptable. This is exhibited through (107) and (108):

(107) Progressive + *lɛɛw45*:

\*naam45 kam33laŋ33 rɔɔn45 lɛɛw45  
 water ASP hot ASP (2004:36)

(108) Progressive + continuative + *lɛɛw45*:

\*naam45 kam33laŋ33 rɔɔn45 yuu22 lɛɛw45  
 water ASP hot ASP ASP (2004:36)

The unacceptability which occurs in these two combinations is in accordance with the first rule involving the incompatibility of the aspect markers *kam33laŋ33* and *lɛɛw45*.

As with a totally stative state of affairs, an action state of affairs, for example (109), allows the combinations progressive + continuative, continuative + *lɛɛw45*, and progressive + future marker *ca22* + continuative + *lɛɛw45*. This is shown in (110)-(112):

(109) Action states of affairs:

yaay33 kam33laŋ33 kin33 khaw42  
 grandma ASP eat rice  
 ‘Grandma is eating.’ (2004:37)

(110) Progressive + continuative:

yaay33 kam33laŋ33 kin33 khaw42 yuu22  
 grandma ASP eat rice ASP  
 ‘Grandma is eating (the action is progressing at reference time).’ (2004:37)

(111) Continuative + *lɛɛw45*:

yaay33 kin33 khaw42 yuu22 lɛɛw45  
 grandma ASP rice ASP ASP  
 ‘Grandma is eating now.’ (2004:37)



- (112) Progressive + future marker *ca22* + continuative + *lɛɛw45*:  
 yaay33 kam33laŋ33 ca22 kin33 khaw42 yuu22 lɛɛw45  
 grandma ASP FUT eat rice ASP ASP  
 ‘Grandma is going to eat right now.’ (2004:38)

Kullavanijaya and Bisang provide some additional explanations concerning the meaning of (111). Exemplifying a context in which (111) could be uttered is that a doctor suggests that the speaker make sure that the grandmother eats some food. The speaker corresponds (111) to the doctor—that she does not have to worry because the grandmother is actually eating. The initial boundary of the action *to eat* is referred to by *lɛɛw45*. The action then proceeds from this temporal boundary. Regarding (112), the compatibility among the three aspect markers is due to the presence of the future time marker *ca22*, which corresponds to the second stated rule.

Action states of affairs, such as totally stative states of affairs, reject the combinations progressive + *lɛɛw45* and progressive + continuative + *lɛɛw45*, as shown in (113) and (114):

- (113) Progressive + *lɛɛw45*:  
 \*yaay33 kam33laŋ33 kin33 khaw42 lɛɛw45  
 grandma ASP eat rice ASP (2004:37)

- (114) Progressive + continuative + *lɛɛw45*:  
 \*yaay33 kam33laŋ33 kin33 khaw42 yuu22 lɛɛw45  
 grandma ASP eat rice ASP ASP (2004:38)

The unacceptability shown in these two combinations can be explained through the incompatibility of the aspect markers *kam33laŋ33* and *lɛɛw45*, which is stated in the first rule.

Inceptive-stative states of affairs as in (115) differ from stative and action states of affairs in that they do not allow the combinations progressive + continuative, continuative + *lɛɛw45*, or progressive + continuative + *lɛɛw45*. According to Kullavanijaya and Bisang, this is because the occurrence of the continuative marker *yuu22* in this type of state of affairs is not possible. This negative influence of the aspect marker *yuu22* is exhibited in (115)-(118):

(115) Inceptive-stative states of affairs:

naam45 rɔɔn45 khun42

water hot up

'The water is becoming hot.' (2004:39)

(116) Progressive + continuative:

\*naam45 kam33lan33 rɔɔn45 khun42 yuu22

water ASP hot up ASP (2004:39)

(117) Continuative + *lɛɛw45*:

\*naam45 rɔɔn45 khun42 yuu22 lɛɛw45

water hot up ASP ASP (2004:39)

(118) Progressive + continuative + *lɛɛw45*:

\*naam45 kam33lan33 rɔɔn45 khun42 yuu22 lɛɛw45

water ASP hot up ASP ASP (2004:39)

Unlike stative and action states of affairs, inceptive-stative states of affairs allow the cooccurrence of progressive and *lɛɛw45*, as shown in (119). Referring to the first rule, *kam33lan33* and *lɛɛw45* are incompatible if they operate in the same temporal unit. Nevertheless, when the two aspect markers cooccur in an inceptive-stative state of affairs, they operate in different temporal phases. In (119), *lɛɛw45* interacts with the stative verb *rɔɔn45* or 'be hot', suggesting the change of state of the water. On the other hand, *kam33lan33* operates in the temporal unit constructed by the resultative verb *khun42* or 'go up', suggesting that the change of state is progressing at the reference or utterance time.

(119) naam45 kam33lan33 rɔɔn45 khun42 lɛɛw45

water ASP hot up ASP

'The water is becoming hot already.' (2004:39)

Similar to the cases of stative and action states of affairs, the combination progressive + future marker *ca22* + continuative + *lɛɛw45* can appear in an inceptive-stative state of affairs, as shown in (120). This complies with the second rule concerning the impact of the future marker *ca22*.

- (120) *naam*<sup>45</sup> *kam33lan*<sup>33</sup> *ca*<sup>22</sup> *rɔɔn*<sup>45</sup> *khun*<sup>42</sup> *yu*<sup>22</sup> *lɛw*<sup>45</sup>  
 water ASP FUT hot up ASP ASP  
 ‘The water is getting hot.’ (2004:39)

Regarding gradually-terminative states of affairs as in (121), the aspect marker *yu*<sup>22</sup>, which depicts the continuation of the state of affairs at the reference or utterance time, cannot appear in a state of affairs of this type. As a result, as in the case of an inceptive-stative state of affairs, the combinations progressive + continuative, continuative + *lɛw*<sup>45</sup> and progressive + continuative + *lɛw*<sup>45</sup> are rejected as shown in (121)-(124):

- (121) Gradually terminative states of affairs:

*yaay*<sup>33</sup> *khit*<sup>45</sup> *ʔɔɔk*<sup>22</sup>  
 grandma think out  
 ‘Grandma found a solution.’ (2004:40)

- (122) Progressive + continuative:

\**yaay*<sup>33</sup> *kam33lan*<sup>33</sup> *khit*<sup>45</sup> *ʔɔɔk*<sup>22</sup> *yu*<sup>22</sup>  
 grandma ASP think out ASP (2004:40)

- (123) Continuative + *lɛw*<sup>45</sup>:

\**yaay*<sup>33</sup> *khit*<sup>45</sup> *ʔɔɔk*<sup>22</sup> *yu*<sup>22</sup> *lɛw*<sup>45</sup>  
 grandma think out ASP ASP (2004:40)

- (124) Progressive + continuative + *lɛw*<sup>45</sup>:

\**yaay*<sup>33</sup> *kam33lan*<sup>33</sup> *khit*<sup>45</sup> *ʔɔɔk*<sup>22</sup> *yu*<sup>22</sup> *lɛw*<sup>45</sup>  
 grandma ASP think out ASP ASP (2004:40)

Unlike the inceptive-stative state of affairs in (120), which accepts the cooccurrence of *kam33lan*<sup>33</sup> and *lɛw*<sup>45</sup>, the gradually-terminative state of affairs in (125) below does not accept it. Kullavanijaya and Bisang claimed that when the resultative verb *ʔɔɔk*<sup>22</sup> or ‘move out’ interacts with the action verb *khit*<sup>45</sup> or ‘to think’, it does not build a new temporal phase as the resultative verb *khun*<sup>42</sup> or ‘to go up’ does when it interacts with the stative verb *rɔɔn*<sup>45</sup> or ‘be hot’. It merely marks the terminal boundary. Therefore, in this case there is only one temporal unit. Following the first rule, the aspect markers *kam33lan*<sup>33</sup> and

*lɛɛw45* cannot operate in the same temporal unit. Consequently, this results in the incompatibility of the combination and this type of state of affairs.

(125) Progressive + *lɛɛw45*:

\*yaay33 kam33laŋ33 khit45 ʔɔk22 lɛɛw45  
 grandma ASP think out ASP (2004:40)

The combination of the future marker *ca22* with the aspect markers *kam33laŋ33*, *yuu22*, and *lɛɛw45* is also compatible with gradually terminative states of affairs. This is exemplified in (126):

(126) Progressive + future marker *ca22* + continuative + *lɛɛw45*:

yaay33 kam33laŋ33 ca22 khit45 ʔɔk22 yuu22 lɛɛw45  
 grandma ASP FUT think out ASP ASP  
 ‘Grandma is close to find a solution.’ (2004:41)

Finally, in terminative states of affairs such as (127), only the combinations progressive + future marker *ca22* + *lɛɛw45* and progressive + future marker *ca22* + continuative + *lɛɛw45* are acceptable. This is shown in (128) and (129):

(127) Totally terminative states of affairs:

khaw24 taay33  
 he die  
 ‘He died.’ (2004:41)

(128) Progressive + future marker *ca22* + *lɛɛw45*:

khaw24 kam33laŋ33 ca22 taay33 lɛɛw45  
 he ASP FUT die ASP  
 ‘He is going to die (anytime now).’ (2004:42)

(129) Progressive + future marker *ca22* + continuative + *lɛɛw45*:

khaw24 kam33laŋ33 ca22 taay33 yuu22 lɛɛw45  
 he ASP FUT die ASP ASP  
 ‘He is going to die any minute.’ (2004:42)

The other combinations, as shown in (130)-(134), are not compatible with totally terminative states of affairs. The reason is that, when an achievement verb indicates a totally terminative state of affairs, the aspect markers *kam33laŋ33* and *yuu22* are not accepted.

(130) Progressive + continuative:

\*khaw24 kam33laŋ33 taay33 yuu22  
 he ASP die ASP (2004:42)

(131) Continuative + *lɛɛw45*:

\*khaw24 taay33 yuu22 lɛɛw45  
 he die ASP ASP (2004:42)

(132) Progressive + *lɛɛw45*:

\*khaw24 kam33laŋ33 taay33 lɛɛw45  
 he ASP die ASP (2004:42)

(133) Progressive + continuative + *lɛɛw45*:

\*khaw24 kam33laŋ33 taay33 yuu22 lɛɛw45  
 he ASP die ASP ASP (2004:42)

(134) Progressive + future marker *ca22* + continuative:

\*khaw24 kam33laŋ33 ca22 taay33 yuu22 lɛɛw45  
 he ASP FUT die ASP ASP (2004:42)

However, the co-combination of the aspect markers *kam33laŋ33* and *yuu22* can co-occur with an achievement verb that is able to denote a series of continuous, totally-terminative states of affairs. (135) exemplifies this exception.

(135) pam45nam45man33 kam33laŋ33 ra45bəət22 yuu22

filling station ASP explode ASP

‘The filling station is exploding.’ (2004:43)

The compatibilities of the combinations of aspect markers and types of states of affairs

addressed by Kullavanijaya and Bisang (2004:43) are summarised in Table 13 below:

	<b>State</b>	<b>Action</b>	<b>Inceptive-stative</b>	<b>Gradually terminative</b>	<b>Totally terminative</b>
<i>kam33lan33 + yuu22</i>	+	+	-	-	-
<i>yuu22 + lɛɛw45</i>	+	+	-	-	-
<i>kam33lan33 + lɛɛw45</i>	-	-	+	-	-
<i>kam33lan33 + yuu22 + lɛɛw45</i>	-	-	-	-	-
<i>kam33lan33 + ca22 + yuu22 + lɛɛw45</i>	+	+	+	+	+

TABLE 13. Kullavanijaya and Bisang's combinations of aspect markers

The co-occurrence of aspect markers in Thai is not well studied. As previous studies have shown, in many cases the co-occurrences seem to present a clash between the imperfective aspect and the perfective aspect. Nevertheless, such temporal disagreement never occurs. Considering the data presented in these studies, the interactions among the aspect markers in general seem to be complicated. This prompts a need for sensible explanations on how and why the different combinations of aspect markers are used.

In the tense-based studies, the relationship among the markers and how they interact to one another are not well explored; the analyses rely very much on the basic meanings of the markers and involve mainly the correspondence of the combinations to the English tenses. This is quite obvious in Upakit Silapasarn's study. The analyses of the combinations presented of Koosamit and Soithurum provide some deep meanings of the combinations. Nonetheless, they are not carried out based on daily contexts and thus the studies fail to provide explanations of how the deep, extra meanings are derived.

In the aspect-based studies, the appearance of multiple aspect markers in a sentence is examined based on the compatibility among the aspect markers as well as the influence of the type of predicate.

Kullavanijaya and Bisang's study, however, does not seem to be superior to the tense-based studies. Rather similar to the tense-based studies, it fails to provide explanations of the derivation of meanings represented in the combinations of aspect

markers. The first drawback in Kullavanijaya and Bisang's study lies in the core idea, which vaguely says that when aspect markers combine, one marker will set a temporal unit while the other(s) operate(s) in this unit. This idea does not seem to efficiently explain some cases such as the combination of the progressive aspect marker *kam33lan33* + future marker *ca22* + *leew45*. Kullavanijaya and Bisang only proposed that the aspect markers *kam33lan33* and *leew45* operate in the temporal unit established by the future marker *ca22* and that the combination hints that the event will commence at the initial part of the future time unit. This explanation still leaves a question concerning how exactly the three markers impact one another and how they denote the immediate futurity of the event. In addition, the three rules set by Kullavanijaya and Bisang seem to be derived from the patterns of the cooccurrences observed in the collective data. When the speaker's intention is taken into account, the application of the three rules to the analyses does not provide a clearer picture of how a combination is compatible with a particular context. Another disadvantage in Kullavanijaya and Bisang's study is that their grammaticality and felicity judgements on some combinations are not truly accurate. The combinations of the aspect markers *kam33lan33* and *leew45* in stative and action states of affairs, which are claimed to be ungrammatical, are in fact still acceptable to some native speakers.

Unlike Kullavanijaya and Bisang, Boonyapatipark offers some insightful analyses of the interactions of the aspect markers which divert from the trait of treating these markers only as temporal devices. One advantage in Boonyapatipark's study is that the data used in the analyses were quite authentic and were generated from contexts that were quite close to what the native speakers encounter in everyday language. Moreover, the study seems to take the speaker's expression process into account and thus is successful in pointing out some extra implications derived through the combinations, especially in the cases of *leew45* and its combinations with the future marker *ca22* and other aspect markers. Unfortunately, Boonyapatipark does not include further analyses or the findings concerning the derivation of these additional meanings in her study.

## 2.4 CONCLUSION

In general, there are still many puzzling issues regarding the co-occurrences of aspect markers in Thai. This makes further studies on this topic quite interesting. Reconsidering all of the possible combinations proposed in both the tense-based and aspect-based studies, *leew45* is apparently the only marker that can co-occur with both the future marker *ca22*

and other aspect markers. Moreover, it is the only marker that is compatible with all types of predicates. This gives rise to the question concerning its true role. It is worth investigating whether there is any possibility that *lɛɛw45*'s role does not conform to the prevailing claims that it plays a role as a perfective aspect marker.

The remainder of this thesis is dedicated to a thorough investigation of *lɛɛw45*. Applying formal semantics and pragmatics, the study is aimed at providing the semantics of *lɛɛw45*. By viewing *lɛɛw45* from a new angle, the study is also aimed at revealing *lɛɛw45*'s operation in the semantics-pragmatics interface. Ultimately, the study is hopefully going to pave the way for investigations on other features of the Thai language, both at the semantic and pragmatic levels.



## Chapter 3

### Past Studies on *lɛɛw45*

There are only a handful studies on temporality in Thai, and in most of these studies aspect markers and particles are not well-explored. *lɛɛw45* is addressed only as part of the system of temporal reference in the language. This chapter discusses four studies which offer some serious and interesting analyses of *lɛɛw45*. These include Sriprasit's (2003) diachronic study on the grammaticalisation of *lɛɛw45* and the study on the conceptualisation of time in Thai carried out by Scovel (1970), which incorporates the investigation into context. These two studies are discussed in Sections 3.1 and 3.2, respectively. The chapter also discusses Kanchanawan's (1978) study on temporality in Thai in Section 3.3. Section 3.4 it discusses Boonyapatipark's (1983) study on aspect markers in Thai, which offers some thorough analyses of the functions and meanings of the aspect markers in the language and their compatibilities and interactions with different types of predicates.

#### 3.1 SRIPRASIT (2003)

Sriprasit carried out a diachronic study of three aspect markers in Thai; namely, *lɛɛw45*, *yuu22*, and *yuu22lɛɛw45*. The study was based on data published in documents from 1282 to 2002, which covered six historical periods; namely, the Sukhothai period, the Ayuthaya period, the reigns of King Rama I-King Rama III, the reigns of King Rama IV-King Rama V, the reigns of King Rama VI-King Rama VIII, and the present period (King Rama IX). The study was aimed at providing an outline of how the three aspect markers were grammaticalised over time. Even though investigation covered the diachronic grammaticalisation of the three aspect markers, only the part concerning *lɛɛw45* will be discussed here.

According to Sriprasit, the general uses of *lɛɛw45* increased over time. The marker is found to be much more frequently used in the current period than in the Sukhothai period, in which the oldest documents were published. In addition, the meanings of *lɛɛw45* in the present day uses are much more varied and dynamic than those found in the uses of the past. In general, *lɛɛw45* has 21 meanings, which include 4 content meanings and 17 functional meanings. The content meanings are derived when *lɛɛw45* is used as the main verb of the sentence. On the other hand, its functional meanings are generated when it is used as a post-serial auxiliary, as idiomatic phrases, and as a discourse marker. *lɛɛw45* also provides several functional meanings when it co-occurs with some particles.

Sriprasit proposed that the grammaticalisation of *lɛɛw45* proceeded in four main stages: Stage 1—before the Sukhothai period, Stage 2—the reigns of King Rama IV-King Rama V period, Stage 3—the reigns of King Rama VI-King Rama VIII, and Stage 4—the current period (King Rama IX).

Sriprasit claims that at the time during Stage 1, *lɛɛw45* was not used only as a main verb but also as a perfective aspect marker and conjunction. The use of *lɛɛw45* as a main verb, however, is quite rare or probably does not exist in present day Thai. When it is used as a main verb it is placed in the post-NP position to suggest the meaning 'to finish'. An example that shows this function of *lɛɛw45* as the main verb is given in (136):

- (136) *kaan33baan42 lɛɛw45 rɯ45yaŋ33*  
 homework to finish QV  
 'Is the homework finished?'

Even though Sriprasit does not make any specific remarks on the use of *lɛɛw45* as the main verb of a sentence, as (136) shows, *lɛɛw45* normally serves as an intransitive verb, not a transitive one, and is supposed to refer to the terminal state of the subject. This is the only meaning conveyed through this function.

The second use of *lɛɛw45* in Stage 1 was to mark the perfective aspect, which still persists in present day Thai. *lɛɛw45* is used in order to narrate the termination of an event, as shown in (137). Located in the final position of the sentence, *lɛɛw45* interacts with the predicate *tham33 kaan33baan42* or 'to do homework', which has *khaw24* or 'he' as the subject. The interaction suggests that the event *do (he, homework)* is accomplished before the utterance or reference time.

- (137) *khaw24 tham33 kaan33baan42 lɛɛw45*  
 he do homework PERF  
 'He did/has done his homework.'

The third function of *lɛɛw45* as a conjunction was also found in this period and still exists at present. Normally, *lɛɛw45* co-occurs with the particle *kɔɔ42*, which contains the meaning 'then'. The combined *lɛɛw45 kɔɔ42* indicates the consecutive relationship of the two clauses it conjoins. An example showing this function of *lɛɛw45* is provided in (138) below:

- (138) khaw<sup>24</sup> dəən<sup>33</sup> pay<sup>33</sup> thii<sup>42</sup> pra<sup>22</sup>tuu<sup>33</sup> lɛɛw<sup>45</sup> kɔɔ<sup>42</sup> lɔk<sup>45</sup> man<sup>33</sup>  
 he walk go to door CONJ PART lock it  
 'He walked to the door and then locked it.'

Sriprasit points out that the functions of *lɛɛw<sup>45</sup>* as a perfective aspect marker and as a conjunction mark the diversion from its original use as the main verb of a sentence both in terms of its syntactic and its semantic properties. According to Sriprasit, when *lɛɛw<sup>45</sup>* is used as a perfective aspect marker or as a conjunction, its locations at the sentence final position and in the position preceding the particle *kɔɔ<sup>42</sup>* prevent it from appearing in the position of the main verb. This is the reason why it is not found in the published documents of the later periods where *lɛɛw<sup>45</sup>* plays its role as the intransitive verb of a sentence to indicate the terminal state of the subject.

One significant change concerning the meaning of *lɛɛw<sup>45</sup>* is found in Stage 2, the period which covers the reigns of King Rama IV and King Rama V. Sriprasit proposed that *lɛɛw<sup>45</sup>* was possibly developed into a function word sometime before this period. In Stage 2 it combines with the word *law<sup>42</sup>*, forming an idiomatic phrase which functions as an adverbial phrase. It suggests that the event has taken place a number of times, as shown in (139):

- (139) *lɛɛw<sup>45</sup>...law<sup>42</sup>*:

khaw<sup>24</sup> bon<sup>22</sup> rɯaŋ<sup>42</sup> ʔaa<sup>33</sup>haan<sup>24</sup> sam<sup>45</sup> lɛɛw<sup>45</sup> sam<sup>45</sup> law<sup>42</sup>  
 he complain issue food repeat Lɛɛw<sup>45</sup> repeat LAW<sup>42</sup>  
 'He has complained about the food many times.'

In Stage 3, or during the reigns of King Rama VI-King Rama VIII, three additional formations of idiomatic phrases are found. The first formation, as shown in (140), was derived from the combination of *lɛɛw<sup>45</sup>* with the word *rɔɔt<sup>42</sup>*. It functions as an adverbial phrase.

- (140) *lɛɛw<sup>45</sup>...rɔɔt<sup>42</sup>*:

con<sup>33</sup> lɛɛw<sup>45</sup> con<sup>33</sup> rɔɔt<sup>42</sup> khaw<sup>24</sup> kɔɔ<sup>42</sup> yaŋ<sup>33</sup> khii<sup>42</sup>kiat<sup>22</sup>  
 until Lɛɛw<sup>45</sup> until Rɔɔt<sup>42</sup> he PART still be lazy  
 'He has certainly been lazy.'

Another pattern of an adverbial idiomatic phrase that is found at this stage is the combination of *lɛɛw45* and the words *kɔɔ42* and *kan33*. The combined component ...*kɔɔ42 lɛɛw45 kan33* suggests the speaker's offer of a solution in order to end the situation. The sentence in (141) exemplifies this pattern:

(141) ...*kɔɔ42 lɛɛw45 kan33*:

ʔaw33 nua42 thii42 lɛa24 pay33 hay42 maa24 kɔɔ42 lɛɛw45 kan33  
 take beef REL be left over go give dog PART Lɛɛw45 PART  
 'So, give the leftover beef to the dog.'

The final formation of an idiomatic phrase found at this stage is the pattern *luan45 lɛɛw45 pay33 duay42...*. This pattern of idiomatic phrase, unlike those discussed earlier, has its function as a verb. It hints that the subject has something in a huge number. An example of this kind of idiomatic phrase is given in (142):

(142) suan24 nii45 luan45 lɛɛw45 pay33 duay42 dɔɔk22may45 naa33naa33  
 garden this be full of Lɛɛw45 go also flower many  
 phan33  
 kind  
 'This garden has many kinds of flowers.'

In Stage 4, which refers to the present time or the reign of King Rama IX, several patterns of idiomatic phrases are found. These include *lɛɛw45...ʔiik22*, ...*kɔɔ42 lɛɛw45*, ...*lɛɛw45 pay33 lɛɛw45*, and ...*thii42 lɛɛw45*. Moreover, the formation *lɛɛw45 kɔɔ42...*, which functions as a discourse marker, is also found in this stage.

*Lɛɛw45...ʔiik22* and ...*kɔɔ42 lɛɛw45* are adverbial phrases. *Lɛɛw45...ʔiik22*, like *lɛɛw45...law42*, implies that the event has taken place a number of times, as shown in (143).

(143) *lɛɛw45...ʔiik22*:

rot45 sia24 lɛɛw45 sia24 ʔiik22  
 car break down Lɛɛw45 break down again  
 'The car has broken down many times.'

The idiomatic phrase ...*kɔɔ42 lɛɛw45* denotes the termination of an event. This can be seen in (144) below:

- (144) kin33 yaa33 kɔɔ42 lɛɛw45 kɔɔ42 yaŋ33 may42 haay24  
 eat medicine PART Lɛɛw45 PART still NEG recover  
 'I took some medicine but have not recovered yet.'

...*lɛɛw45 pay33 lɛɛw45* is similar to *luan45 lɛɛw45 pay33 duay42...* in that it also functions as a verb. However, it does not show the abundance of something but indicates that the speaker regards the event as a bygone one. (145) is an example:

- (145) rɯaŋ42 ŋəən33 haay24 man33 lɛɛw45 pay33 lɛɛw45 chaŋ42 thəə22  
 issue money be lost it Lɛɛw45 go Lɛɛw45 ignore let  
 'As for the lost money, let it be bygone (let's ignore it).'

The last formation of an idiomatic phrase that is found at this stage is ...*thii42 lɛɛw45* which, as shown in (146), acts as a time marker.

- (146) khaw24 pay33 phuu33ket22 mɯa42 wan33saw24 thii42 lɛɛw45  
 he go Phuket when Saturday REL Lɛɛw45  
 'He went to Phuket last Saturday.'

The combination of *lɛɛw45* with *kɔɔ42* serves as a discourse marker. It signals that the first and second clauses of the sentence agree in such a way that the predicate in the second clause is either the subsequence or the result of the predicate in first clause. An example is provided in (147):

- (147) khaw24 hen24 tuu42cot33maay24 lɛɛw45 kɔɔ42 cam33 daay42 waa42  
 he see post box Lɛɛw45 PART remember can COMP  
 luum33 soŋ22 cot22maay24  
 forget send letter  
 'He saw the post box and realised that he forgot to post the letter.'

In general, Sriprasit proposed that only the meaning 'to finish', which is *lɛɛw45*'s original meaning, passed through the grammaticalisation process and has prevailed from the past up to the present. In addition, all of the meanings of *lɛɛw45* stem from the marker's original meaning.

Even though Sriprasit's study does not provide any syntactic or semantic analyses on *lɛɛw45*, it implicitly provides some guidance for further investigations on the marker. A variety of functions of *lɛɛw45* found in the current period does not confirm the conventional claim that *lɛɛw45* plays a role as an aspect marker; *lɛɛw45* possibly conveys some other meanings which in turn determine the requirements for its use. These requirements may be active not only at the sentence level but also at the discourse level.

### 3.2 SCOVEL (1970)

Scovel's study on the conceptualisation of time in Thai exhibits an attempt to dig deeply into the motivation for the use of aspect markers in real contexts. Regarding his analyses of *lɛɛw45*, Scovel, first of all, proposed that the meaning of *lɛɛw45* prevailing in contemporary use came from its original meaning 'to finish', which is derived from its original function as the main verb of a sentence. In line with many studies, Scovel's study also proposed that *lɛɛw45* basically denotes the completion of the event. Scovel addresses both functions of *lɛɛw45* as a coordinator, which means 'and then', and as a post-verbial aspect marker. When it performs the latter function, *lɛɛw45* indicates either the completion of an event or a change of state. Scovel makes an additional claim regarding this function of *lɛɛw45*, saying that *lɛɛw45*'s role as the marker of the completion of an event is in fact not its primary role; *lɛɛw45* is used mainly to denote a change of state from which the completion of the event is acknowledged. Scovel clarifies his claim through his example sentence, in which *lɛɛw45* cooccurs with an accomplishment predicate. The sentence is restated in (148) below:

- (148) khaw<sup>24</sup> pay<sup>33</sup> roŋ<sup>33</sup>rian<sup>33</sup> lɛɛw<sup>45</sup>  
           he       go       school       POST-V  
           'He has gone/went to school.'       (1970:106)

In order to explain the operation of *lɛɛw45* in the above sentence, Scovel recalls the basic features + *Point* and -*Point* (period) observed in the different types of predicate, which are

summarised in Table 14. The feature +Point indicates the point of time at which the event takes place, while the feature -Point designates the period of time in which the event proceeds.

+Point	-Point (period)
Accomplishment	State
Event	Activity

TABLE 14. Scovel's basic features of predicates

What takes place in (148) is that, *lɛw45* indicates the point when the event *go to school (he)* occurs. It suggests that due to the influence of *lɛw45*, the predicate *pay33 roŋ33rian33* or 'go to school' is no longer regarded as an activity predicate which occurs in a stretch of time. The presence of *lɛw45* removes the feature *-Point* and replaces it with the *+Point* feature. It then changes the category of the predicate from an activity to an accomplishment. This also happens with a state, which is exemplified in (149):

(149) *thuuk22 lɛw45*  
 correct POST-V  
 'You're right!/Now you've got it!' (1970:107)

With the presence of *lɛw45*, the point of time at which the change to the state of being correct takes place is emphasised. Similar to (148), the feature *-Point* is replaced by the feature *+Point* and the predicate is no longer viewed as a state but as an event which, in Scovel's study, refers to an achievement predicate.

Scovel suggests that in indicating the point of time, the feature *+Point* commonly signals the completion of the event. Therefore, the replacement of the feature *-Point* with the feature *+Point* in activities and states automatically adds the meaning of completion to the predicate. The general meaning 'the completion of the event' of *lɛw45* is indirectly derived from this phenomenon.

Regarding the co-occurrence of *lɛw45* with an achievement predicate, which also represents the point of time at which the event takes place, Scovel suggests that *lɛw45* does not signal a change in predicate type as it does in the cases of an activity and a state.

Rather, it merely emphasises that the event occurred at a point in time in the past.

Even though Scovel's study presents a very interesting analysis of the function and meaning of *lɛɛw45*, some problems are still unsolved. First of all, even though he claims that *lɛɛw45* marks a change of state, Scovel fails to address the definition of change of state and its relationships to time and aspect. He only discusses in detail the change in predicate type which is induced by the replacement of the feature *+Point* with the feature *-Point*. Such a change does not account for a change of state which involves the old and new states at different points of time.

Another problem lies in Scovel's categorisation of the predicate *pay33 rooŋ33rian33* or 'go to school' in (148) as an activity. This categorisation is not totally correct. The predicate can be categorised either as an activity or an accomplishment depending on how *rooŋ33rian33* or 'school' is viewed. In Thai the directional preposition *thii42* or 'to/at' can be omitted. If *rooŋ33rian33* is viewed as a modifier of the verb *pay33* or 'to go', it suggests a form of the action going, school going, as opposed to temple going, for example. It is likely that according to this view, the predicate *pay33 rooŋ33rian33* is an activity in which a time span exists and a terminal point of the event is not determined. The presence of *lɛɛw45* thus seems to enable the change in category from an activity to an accomplishment, as suggested by Scovel. On the other hand, if *rooŋ33rian33* is viewed as the goal or the destination of the verb *pay33*, then the predicate *pay33 rooŋ33rian33* is categorised as an accomplishment that already contains a terminal point for the event. If this is the case, *lɛɛw45* then does not imply a change in category.

Another problematic issue concerning the predicate type and the role of *lɛɛw45* is that, the presence of *lɛɛw45* does not necessarily mark a point of time that the event terminates. Normally, an accomplishment can be followed by a predicate which reveals a contradiction that in fact the preceding accomplishment predicate is not complete. Such a phenomenon can occur even when *lɛɛw45* is present. An example is provided in (150):

- (150) khaw24 pay33 rooŋ33rian33 lɛɛw45 tɛɛ22 yan33 may42 thɯŋ24  
 he go school POST-V but still NEG arrive  
 'He has gone to school but has not arrived there yet.'

As an accomplishment suggests, the event *go to school (he)* will not terminate until the person arrives at the school. However, in (150) this has not happened yet. The occurrence of *lɛɛw45* thus does not hint at the completion of the event. Rather, it



marks a counter-expectation, suggesting that previously the event had not been expected to happen but recently it has taken place. What should be pointed out here is that *lɛɛw45* can refer to any point along the run time of the event, be it the initial point, the point during the ongoing stage, or the terminal point. Therefore, it does not always denote the completion of the event.

### 3.3 KANCHANAWAN (1978)

Before providing a discussion of *lɛɛw45* as presented in Kanchanawan's (1978) study on temporality in Thai, the core idea of the study should be briefly stated. Even though the study does not massively rely on the idea that temporal reference in Thai can be mapped to the English tenses, as seen earlier in the studies carried out by Rattanotayanon (1982), Koosamit (1983), and Soithurum (1985), it does point out that tense exists in Thai. Tense, according to the study, is represented through different time phrases and it is obligatory that a sentence carry a time phrase, either an overt or a covert one. Regarding time markers and aspect markers, these linguistic devices have syntactic functions as pre-serial verbs, auxiliaries, post-serial verbs, and particles. In accordance with the fundamental idea of the study, these markers do not play a significant role as time phrases. In addition, following the requirement for at least one time phrase in a sentence, the appearance of an aspect marker in a sentence resembles the simultaneous presence of tense and aspect in English. The aspect marker conveys the aspectual property of the event in relation to the reference time suggested by the time phrase. Kanchanawan proposed the categorisations of time phrases, time markers, and aspect markers which are dramatically different from those proposed in many studies. However, as these do not have any implications for the analysis of *lɛɛw45*, they will not be discussed here.

Kanchanawan claimed that *lɛɛw45* has three basic meanings, which include 'be ready', 'already', and 'to finish'. Syntactically, it functions either as a post-serial verb or a particle while semantically, it denotes both the past time and the perfective aspect of the event. Kanchanawan's claim for *lɛɛw45*'s role as a perfective aspect marker is based on its lexical meaning 'completion'. Kanchanawan also proposed that *lɛɛw45* co-occurs with all three types of time reference—present, past and future. (151)-(153) are some examples that follow Kanchanawan's proposal:

(151) Past time reference:

mua42khaun33nii45 khaw24 pay33 duu33 naŋ24 læw45  
 last night he go watch movie PERF  
 'Last night he went to a movie.'

(152) Present time reference:

toon33nii45 khaw24 lap22 læw45  
 now he sleep PERF  
 'He has already gone to bed (and he is sleeping now).'

(153) Future time reference:

?aa33thit45naa42 khaw24 ca22 klap22 baan42 læw45  
 next week he FUT return home PERF  
 'Next week he will come home.'

Questions arise from these three samples regarding the claim that *læw45* contains the meaning of completion and denotes the perfective aspect of the event. Kanchanawan made some remarks concerning the presence and absence of the perfective aspect when *læw45* is present. According to her, ambiguities can possibly be detected in several cases. When *læw45* appears in an activity predicate, it does not necessarily indicate the completion of the event. In some cases, it indicates that the event is in progress. This phenomenon can lead to ambiguity in regard to whether the predicate should be interpreted as perfective or imperfective. The sentence in (154) exemplifies a case in which three interpretations are possible.

(154) toon33nii45 khaw24 tham33 kaan33baan42 læw45  
 now he do homework PERF

- (i) 'Now he is doing his homework (he has not finished it yet).'
- (ii) 'Now he has done some of his homework (he has not finished the whole assignment).'
- (iii) 'Now he has already finished his homework.'

Kanchanawan also makes a small reference to the English tenses, claiming that when *læw45* co-occurs with the past time reference, it depicts either an event in the past in the

same manner as the simple past tense, or the completion of an event in the same manner as the past perfect tense. This is shown in (155) below:

- (155) hi22ma45 la45laay33 lɛɛw45  
 snow melt PERF  
 (i) 'The snow melted.'  
 (ii) 'The snow had melted.'

Ambiguity can also be detected in the case in which *lɛɛw45* co-occurs with the future time reference. It can either indicate the futurity of an event in the same manner as the simple future tense or signal that the event will have taken place or be completed in the future in the same manner as the future perfect tense. (156) exemplifies such ambiguity:

- (156) pii33naa42 chan24 ca22 rian33 cop22 lɛɛw45  
 next year I FUT study finish PERF  
 (i) 'Next year I will finish my study.'  
 (ii) 'Next year I will have finished my study.'

Overall, even though Kanchanawan's study on the functions and meanings of *lɛɛw45* fails to deal with several problematic issues, it reveals some remarkable features of *lɛɛw45*. The problems detected in the study arise mainly from the contradiction between Kanchanawan's claims regarding the function of *lɛɛw45* as a perfective aspect marker versus the absence of the perfective aspect in many cases. When addressing the general meaning and function of *lɛɛw45*, Kanchanawan only proposed the possible compatibilities of *lɛɛw45* with three varieties of time references. A serious drawback still prevails in the cases in which *lɛɛw45* co-occurs with the present and future time references. She neither explains why the occurrences are possible nor proposes what the basic meaning of *lɛɛw45* and its basic function as a perfective aspect marker contribute to the predicates that contain these time references. There must be some reasons why the odd co-occurrence of the perfective aspect marker and the imperfective predicate is acceptable.

Kanchanawan's remarks on the ambiguities that could delay the interpretation process indeed point out one strange, puzzling ability of *lɛɛw45*—to offer either a perfective or imperfective reading. However, it is quite possible that these ambiguities are not attributed to the presence of *lɛɛw45* in the sentence. The different interpretations for

each sentence seem to result from the nature of the predicate, especially a predicate that conveys a period of time in which the starting point and terminal point of the event exist. In this kind of predicate, for example an accomplishment, *lɛɛw45* is likely to be able to operate at any point during the run time of the event. If this is the case, then another question arises. Why is this phenomenon possible? Unfortunately, apart from the data, Kanchanawan does not provide any answer for this question.

### 3.4 BOONYAPATIPARK (1983)

Boonyapatipark addresses the function and meaning of the post-verbial *lɛɛw45* by comparing it to the function and meaning of the main verb *lɛɛw45*, which is very rare in present day Thai. She suggests that while the main verb *lɛɛw45* denotes the completion of the event, the post-verb *lɛɛw45* does not. Rather, it offers some extra meanings which do not concern the completion of the event.

Boonyapatipark also points out another interesting difference between the two varieties of *lɛɛw45*. According to her, the main verb *lɛɛw45*, but not the post-verb *lɛɛw45*, can be negated. This is exhibited in the restated (157) and (158):

(157) *ɲaan33 may42day42 lɛɛw45 kɔɔn22 kam33not22*  
 work NEG be finished before schedule  
 'The work was not finished before schedule.' (1983:153)

(158) \**khaw24 khɛŋ24rɛɛŋ33 may42day42 lɛɛw45*  
 he be strong NEG Lɛɛw45 (1983:153)  
 (intended) 'He is not strong anymore.'

In (157) the negator *may42day42* converts the affirmative meaning 'The work was finished before schedule' of the predicate *ɲaan33 lɛɛw45 kɔɔn22 kam33not22* to its negative version, that is, 'It is not the case that the work was finished before schedule' or 'The work was not finished before schedule'. The negation in (158), according to Boonyapatipark, is considered ungrammatical.

Boonyapatipark did not carry out any further investigations into the function and meaning of the main verb *lɛɛw45*, and focused only on the post-verb *lɛɛw45*. She proposed that *lɛɛw45* as a post-verb acts as an aspect marker. In contrast to the claim made by

Scovel, which says that *lɛɛw45* marks the completion of the event, Boonyapatipark proposed that *lɛɛw45* in fact does not always behave so. She clarified this idea through an example which is restated in (159):

- (159) khruu33 sɔɔn42 lɛɛw45 rew33khaw42  
 teacher teach Lɛɛw45 hurry up  
 'The teacher has started the lessons, we'd better hurry up.' (1983:155)

The occurrence of *lɛɛw45* in the activity predicate in (159) does not indicate that the event *teach (the teacher)* has reached its completion. Instead, it suggests that the event has taken place and is in progress. Accordingly, *lɛɛw45*, in line with the first point in Scovel's proposal, marks the point of time at which the event takes place. However, it does not comply with his second idea as it does not mark the completion of the event.

According to Boonyapatipark, *lɛɛw45* depicts a new situation. Her finding is based on the occurrence of *lɛɛw45* in a predicate which contains a permanent state, as shown in the restated (160):

- (160) khaw24 ruay33 lɛɛw45  
 he be rich Lɛɛw45  
 'He is rich now.' (1983:155)

The presence of *lɛɛw45* in the above sentence suggests that the person is assumed to have been poor in the past but now he is rich. The person's being rich in the present time is the new situation which replaces the old situation in which he was poor.

The idea that *lɛɛw45* marks the arrival of a new situation, as suggested by Boonyapatipark, also applies to the case of an activity predicate in (159) in which the completion of the event does not exist. The new situation in which the teacher teaches lessons has recently begun.

Boonyapatipark makes some remarks on the influence of contexts on the aspectual interpretation of an activity predicate in which the event proceeds over a particular period of time. She exemplifies it via the cases in (161) and (162) in which the contexts are set by the time expressions. These contexts determine whether the predicates attached with *lɛɛw45* offer an imperfective or perfective reading.

(161) khaw<sup>24</sup> tham<sup>33</sup> kaan<sup>33</sup>baan<sup>42</sup> lɛw<sup>45</sup> tɔn<sup>33</sup>nii<sup>45</sup> waan<sup>42</sup>  
 he do homework Lɛw<sup>45</sup> now be free  
 'He has finished his homework and is free now.' (1983:156)

(162) khaw<sup>24</sup> tham<sup>33</sup> kaan<sup>33</sup>baan<sup>42</sup> lɛw<sup>45</sup> ?iik<sup>22</sup>diaw<sup>24</sup> khon<sup>33</sup> set<sup>22</sup>  
 he do homework Lɛw<sup>45</sup> soon probably finish  
 'He has done a certain amount of his homework and will probably get it completed soon.' (1983:156)

The event *do(he, homework)* both in (161) and (162) leads to different aspectual interpretations which are influenced by the subordinate clause of each sentence. In each case, the subordinate clause acts as a temporal expression which hints at the aspectual properties of the event. In (161), the meaning of the subordinate clause *tɔn<sup>33</sup>nii<sup>45</sup> waan<sup>42</sup>* or 'now he is free' signals that the person's action of doing homework has already reached its termination. The reason is that, the person cannot be free if he has not finished his homework. Therefore, in the predicate *khaw<sup>24</sup> tham<sup>33</sup> kaan<sup>33</sup>baan<sup>42</sup> lɛw<sup>45</sup>* in the main clause *lɛw<sup>45</sup>* denotes the perfective aspect. In contrast, in (162) the subordinate clause *?iik<sup>22</sup>diaw<sup>24</sup> khon<sup>33</sup> set<sup>22</sup>* or 'he will probably get it (the homework) completed soon' implies that at the time of the utterance the person has not finished his homework. As such, *lɛw<sup>45</sup>* in the main clause, unlike in (161), denotes the imperfective aspect of the predicate '*khaw<sup>24</sup> tham<sup>33</sup> kaan<sup>33</sup>baan<sup>42</sup>*'.

Without a context, it is very difficult to identify the aspectual property of the predicate. This problematic case exemplified in (163) leads to three different aspectual interpretations:

(163) khaw<sup>24</sup> tham<sup>33</sup> ŋaan<sup>33</sup> lɛw<sup>45</sup>  
 he do work Lɛw<sup>45</sup>  
 (i) 'He has finished his work.' (completion)  
 (ii) 'He has started working.' (inchoative meaning)  
 (iii) 'He is about to work.' (imminent situation) (1983:157)

The sentence in (163) will be interpreted with ease and accuracy if the reference time is present, either overtly or covertly. As shown in (164)-(166), with the occurrences of the future marker *ca<sup>22</sup>*, which Boonyapatipark treats as a prospective marker, the verb *set<sup>22</sup>* or

'to finish', and the verb *rəəm42* or 'to start', for example, the interpretations are much easier.

(164) khaw24 tham33 ɲaan33 set22 lɛɛw45  
 he do work finish Lɛɛw45  
 'He has finished his work.' (1983:157)

(165) khaw24 rəəm42 tham33 ɲaan33 lɛɛw45  
 he start do work Lɛɛw45  
 'He has started working.' (1983:157)

(166) khaw24 ca22 tham33 ɲaan33 lɛɛw45  
 he PROS do work Lɛɛw45  
 'He is about to work.' (1983:157)

Boonyapatipark claims that the three meanings; namely, the completion, the inchoative meaning, and the imminent situation, are the meanings that can be generally derived from the presence of *lɛɛw45*. They all suggest that when *lɛɛw45* is present it indicates that, first of all, a particular activity has proceeded to a point of time. Secondly, it indicates that at the reference time a change or a new situation, which marks the crucial point of the situation, has arrived. The crucial point of the situation does not necessarily refer to the completion point.

According to Boonyapatipark, the two fundamental implications drawn from *lɛɛw45* can be detected in the three meanings that it generates. The completion meaning suggests that a crucial point of the situation has been reached and this crucial point includes the point at which the situation is completed. Accordingly, in (164), the person had done a certain amount of his work until the point of time at which he has finally finished it. Likewise, the inchoative meaning hints that the action had carried on until it reached a crucial point of the situation at which a change or a new situation occurred. She provided a piece of evidence, as shown in the restated (165). It suggests that the person had not worked for a certain period of time until the point of time when he started working and a new situation has come into existence. The two implications of *lɛɛw45* also prevail in the imminent situation. In (166) the person had not worked up until a stage which represents a clear signal that she is ready to work.

In relation to the idea that *lɛɛw45* marks a point of time at which the situation takes place, Boonyapatipark makes a further claim that *lɛɛw45* denotes perfectivity. As such, it neither views the situation from inside nor refers to the internal structure of the situation in the same manner as the imperfective aspect markers. In addition, *lɛɛw45* links the specific point of time that it marks to both the situations prior and posterior to it.

Regarding her claim that *lɛɛw45* implies the arrival of a new state of the situation, Boonyapatipark provides some explanations through the comparisons of the sentences marked with *lɛɛw45* and the unmarked sentences. The former proffers the implication that previously the state of the situation which is asserted in the sentence did not exist. Some sample minimal pairs of the two versions of the same sentences are restated in (167)-(170):

(167) nit45 ʔuan42 lɛɛw45  
 Nid be fat Lɛɛw45  
 'Nid is fat now (the implication is that she was not fat before).' (1983:159)

(168) nit45 ʔuan42  
 Nid be fat  
 'Nid is fat.' (1983:159)

(169) khaw24 day42rap45 cot22maay24 lɛɛw45  
 he receive letter Lɛɛw45  
 'He has received a letter.' (1983:159)

(170) khaw24 day42rap45 cot22maay24  
 he receive letter  
 'He has received a letter.' (1983:159)

Boonyapatipark explained that in (169) the new state emerges from the fact that the person had been waiting for the letter and finally he has received it. His receiving the letter represents a change in the situation and suggests that the waiting situation has ended.

In order to strengthen her claim, Boonyapatipark makes an argument against the idea that *lɛɛw45* denotes the perfect aspect. According to her, the cases in (171)-(173), there is a high possibility that *lɛɛw45* acts as a perfect aspect marker, depicting the state of affairs which results from an action.



(171) nit45 tham33 kaan33baan42 set22 læw45  
 Nid do homework finish læw45  
 'Nid has finished her homework.' (1983:160)

(172) nit45 kin33 khaw42 læw45  
 Nid eat rice læw45  
 'Nid has already eaten.' (1983:160)

(173) khaw24 maa3thəŋ24 læw45  
 he arrive læw45  
 'He has arrived.' (1983:161)

Boonyapatipark points out that *læw45* indicates the perfect aspect in the above cases possibly because by adding *læw45* the speaker refers to the situation she has encountered recently. In (171), the speaker probably refers to the homework which has recently been assigned by the teacher while (172) might refer to the latest meal that was served not long ago. In (173) he seems to emphasise that the person is still at the place where he has arrived.

Boonyapatipark argues that the treatment which regards *læw45* as a perfect aspect marker nonetheless fails to account for the cases in (174)-(176). In each of these cases *læw45* marks the temporal point at which one situation which had carried on for a certain amount of time ended and at the time at which the sentence is uttered this situation no longer exists.

(174) khaw24 maa3thəŋ24 læw45 læ45 kə42 ʔəʔk22 pay33 ʔiik22  
 he arrive læw45 and PART out go again  
 'He arrived and then went out again.' (1983:161)

(175) khaw24 ʔəʔk22 pay33 læw45 tæ22 ləum33 khəŋ24 way45  
 he out go læw45 but forget thing keep  
 læy33 klap22 maa33 ʔiik22  
 so return come again  
 'He left but remembered that he had forgotten to take something with him,  
 so he came back again.' (1983:162)

- (176) khaw<sup>24</sup> maa<sup>33</sup> thi<sup>42</sup>nii<sup>42</sup> lɛɛw<sup>45</sup> khrəŋ<sup>45</sup>nəŋ<sup>22</sup> kɔŋ<sup>22</sup> khaw<sup>24</sup> taay<sup>33</sup>  
 he come here Lɛɛw<sup>45</sup> once before he die  
 'He came here once before he died.' (1983:162)

Overall, Boonyapatipark presents an insightful analysis of *lɛɛw<sup>45</sup>*. With the findings concerning change of state and the implication of the existence of the old state and the new state at different points of time, the analysis introduces a new perspective on the role of *lɛɛw<sup>45</sup>*. Nevertheless, there are some points that are not completely correct. The first problematic point in Boonyapatipark's analyses concerns her claim that the post-verbial *lɛɛw<sup>45</sup>* cannot be negated. Referring to her example in (158), which is restated in (177), a plausible reason why *lɛɛw<sup>45</sup>* is not compatible with the permanent stative does not lie in the semantics of *lɛɛw<sup>45</sup>* but in the incompatibility between the negator *may<sup>42</sup>day<sup>42</sup>* and the permanent stative predicate.

- (177) \*khaw<sup>24</sup> khəŋ<sup>24</sup>rɛŋ<sup>33</sup> may<sup>42</sup>day<sup>42</sup> lɛɛw<sup>45</sup>  
 he be strong NEG Lɛɛw<sup>45</sup> (1983:153)

Normally, the negator *may<sup>42</sup>day<sup>42</sup>* is used to negate capabilities and in fact allows the occurrence of *lɛɛw<sup>45</sup>*, as (178) exemplifies:

- (178) khaw<sup>24</sup> waay<sup>42</sup>naam<sup>45</sup> may<sup>42</sup>day<sup>42</sup> lɛɛw<sup>45</sup>  
 he swim NEG Lɛɛw<sup>45</sup>  
 'He cannot swim anymore (previously he could).'

Permanent statives such as *khəŋ<sup>24</sup>rɛŋ<sup>33</sup>* or 'be strong' do not represent a capability so they are not supposed to be compatible with the negator *may<sup>42</sup>day<sup>42</sup>*. However, as (179) shows, it can be negated by another negator *may<sup>42</sup>*, which contains a neutral negative meaning and the use of which is not restricted to capabilities.

- (179) khaw<sup>24</sup> may<sup>42</sup> khəŋ<sup>24</sup>rɛŋ<sup>33</sup> lɛɛw<sup>45</sup>  
 he NEG be strong Lɛɛw<sup>45</sup>  
 'He is not strong anymore (previously he was).'

The co-occurrence of *lɛɛw45* and negation also provides proof against the claim of Boonyapatipark, which says that *lɛɛw45* marks perfectivity and that a situation proceeds over a period of time until the point of time at which a change arrives. Consider (180) below:

(180) khaw24 may42day42 rap45 cot22maay24 lɛɛw45  
 he NEG receive letter Lɛɛw45

'He did not receive the letter (previously he expected that he would receive it).'

During the period of time prior to the point at which the person's action of not receiving the letter takes place, the situation in which the person received the letter did not exist. The receipt of the letter is only part of the expectation, that is, the person would receive his letter. The phenomenon happening in this counter-example is hypothesised to be caused by the interaction between *lɛɛw45* and negation, which is different from the interactions between aspect markers and negation. The negation does not yield the meaning 'It is not the case that...' as it usually does in normal cases, such as the case in (181), in which it co-occurs with the progressive/imperfective aspect marker *kam33lan33*.

(181) khaw24 may42day42 kam33lan33 duu33 thii33wii33  
 he NEG PROG watch television

'He is not watching the television (he is doing something else).'

However, when negation appears in a sentence marked with *lɛɛw45* it does not flip the affirmative version of the sentence to its negative version. Rather, it negates the presuppositional expectation and suggests that the expectation is no longer valid.

### 3.5 CONCLUSION

Considering the findings from all of the studies discussed in this section, it is evident that *lɛɛw45* is active not only to indicate temporality but also to convey some discourse meanings. The earlier studies carried out by Scovel and Kanchanawan mainly revealed the functions of *lɛɛw45* in denoting certain temporal occurrence; namely, the completion and the perfective aspect of the event. Despite such emphasis, the two studies also raised issues which probably do not primarily involve the temporal functions of *lɛɛw45* but

indicate discourse effects that the marker might yield. Unfortunately, the fundamental claims offered in these two studies do not successfully account for these issues. The later study undertaken by Boonyapatipark provides more insightful analyses which were carried out under more authentic contexts. However, though it addresses the role of *lɛɛw45* at the discourse level, the study seems to leave the issues as to what the discourse function of *lɛɛw45* is and how it is created, as open questions. No further analyses are available in the study. Sriprasit's diachronic study apparently confirms that *lɛɛw45* possibly plays a role in discourse. A good piece of evidence comes from the finding that at the present time *lɛɛw45* has different functions and conveys various meanings. These include its function and meaning at the discourse level which indicate the agreeing relationship between the main clause and the subordinate clause. Considering all of the findings from these studies, it is worthwhile reappraising *lɛɛw45* in order to find what its true role is. This is the main objective of this study. The remainder of the current study is dedicated to the reappraisal of *lɛɛw45* both at the semantic and pragmatic/discourse levels, which leads to some fresh findings.

## **Chapter 4**

### **Arguments against the Conventional Claims**

In Chapter 3, several analyses of the function and meaning of *leew45* from past studies have been presented. Most of these analyses led to the claim that *leew45* mainly serves as a temporal device denoting either the perfective aspect or the completion of an event. A few analyses, on the other hand, have pointed out that *leew45* also plays certain non-temporal roles. In this chapter, a reappraisal of *leew45* will be presented. The chapter presents another look at *leew45* which does not focus primarily on its temporal functions but is open to explorations of its role as a discourse particle. Based on a large number of counter-examples, the chapter argues against the conventional claims involving *leew45*'s roles in temporality. In addition, it proposes that *leew45* is used primarily to mark a counter-expectation, which is derived from the contradiction between the asserted proposition and the implicated expectation.

In order to fulfil the purpose of this chapter, first of all, some pieces of supporting evidence for the arguments against the conventional claims are provided in Section 4.1. Then in Section 4.2 the claim that *leew45* plays its role as a marker of counter-expectation, which is the key message of the current study, is proposed. Some pragmatic features observed regarding *leew45*'s antecedents are discussed in Sections 4.3.

#### **4.1 SUPPORTING EVIDENCE FOR THE ARGUMENTS AGAINST THE CONVENTIONAL CLAIMS**

This section presents a number of counter-examples against the conventional claims. These cases, in which *leew45* occurs with various types of predicates show that the particle does not necessarily mark the perfective aspect or the completion of an event and that perfectivity and telicity can be derived without the presence of it.

##### **4.1.1 *Leew45* and predicates with default natural end points**

This section offers a discussion on the role of *leew45* in predicates with default natural end points. This type of predicate refers to two sub-types of predicate; namely, serial resultatives and non-series achievements.

A serial resultative is a predicate that is composed of an activity verb and a post-serial particle, which indicates the consequent result contributed from the activity verb. The activity verb suggests that the event proceeds for a particular period of

time before it finally reaches the terminal point where a particular result is observed. This type of predicate is exemplified in (182):

- (182) khaw24 khit45 ʔɔk22
- he think out
- 'He had thought for a while and finally got the solution.'

In the above sentence, the predicate is comprised of the activity verb *khit45* 'to think' and the directional preposition *ʔɔk22* 'out'. The directional preposition suggests that the solution is successfully obtained as a result of the action of thinking and is experienced immediately after the completion of the activity. Regarding its temporal properties, a serial resultative looks similar to an accomplishment predicate which contains an activity predicate plus the goal or the result of the activity. Nevertheless, it is actually not the case. The reason is, in a serial resultative, the result from the activity, not the activity, is focused on. Thus, its temporal nature is in fact similar to that of an achievement; both indicate that the event takes place and terminates within a small fraction of time before the reference time. Accordingly, the end point of the event is derived by default. Figure 1 illustrates the temporal property of a serial resultative. RT and *e* stand for 'reference time' and 'event', respectively. For a serial verb,  $\diamond====\diamond$  illustrates the activity while +++ illustrates the achievement. The reference time is illustrated by the symbol  $\blacklozenge$  and the result of the serial verb is illustrated by -----. The line ~ ~ ~ symbolises the time before the event time.

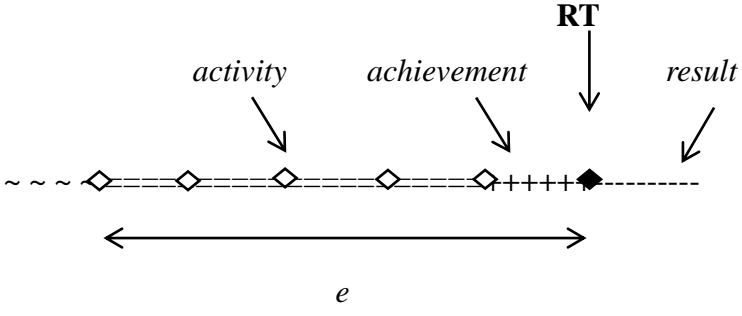


FIGURE 1. The temporal nature of serial resultatives

Like serial resultatives, non-series achievements, or in other words, achievements that take place only once, carry default end points. This is exemplified in (183):

(183) fay33faa45 dap22  
 power go out  
 'The power went out.'

Obviously, the achievement verb *dap22* 'to go out' (as an intransitive verb in this case) provides both the starting point and the end point of the event. The span between these two points, as illustrated in Figure 2, lies over a very short period of time. +++ illustrates the achievement and the reference time is illustrated by the symbol ◆. The result of the achievement is illustrated by the line -----. The line ~ ~ ~ symbolises the time before the event time.

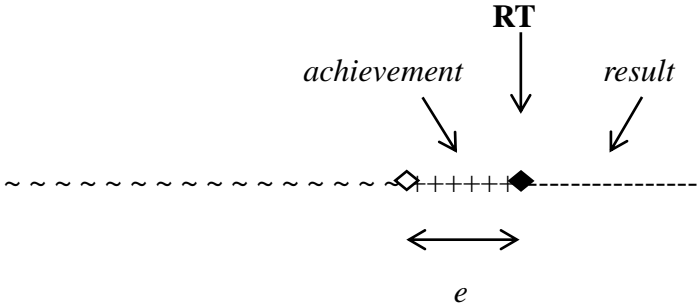


FIGURE 2. The temporal nature of non-series achievements

Owing to their properties mentioned above, serial resultatives and non-series achievements are not compatible with progressiveness. Therefore, the addition of the progressive/imperfective aspect marker *kam33laŋ33* to the serial resultative in (184) and the non-series achievement in (185) is unacceptable.

(184) \*khaw24 kam33laŋ33 khit45 ʔɔk22  
 he PROG think out

(185) \*fay33faa42 kam33laŋ33 dap22  
 power PROG go out

The addition of *leɛw45* to these two types of predicate, however, is acceptable as shown in (186) and (187):

(186) khaw24 khit45 ʔɔk22 lɛw45  
 he think out PART

'He got the solution (previously he had not got the solution and we expected that he would not get it).'

(187) fay33faa42 dap22 lɛw45  
 power go out PART

'The power went out (previously it was on and we expected that it would not go out).'

Based on (186) and (187), it seems plausible to propose that *lɛw45* marks the time boundaries at the terminal parts of the events and that it leads to two perfective readings which suggest that the events already took place and were completed prior to the reference times. However, it is noteworthy that, despite the absence of *lɛw45*, the perfective aspect and the completion of the two events still prevail in (186) and (187). This is due to the fact that in general the end points, which are default by nature, are inherited in serial resultatives and non-series achievements. Moreover, in the case of (187), the persistence of perfectivity in the predicate is due to the lexical aspect of the achievement verb *dap22* 'to go out'. Interestingly, in this case the absence of *lɛw45*, as shown in (188) does not affect the truth-condition of the sentence, that is, 'the sentence is true if and only if the electric power of a particular place went out and has not come back at the reference time' at all. The presence of the past time expression *mua42waan33nii45* or 'yesterday', which provides the exact location of the reference time on the time line, denotes the same temporal property of the event and still satisfies the truth-condition of the sentence.

(188) fay33faa42 dap22 mua42waan33nii45  
 power go out yesterday

'The power went out yesterday (previously it had been on and we expected that it would not go out).'

The above examples show that in serial resultatives and non-series achievements *lɛw45* coincidentally operates in the terminal part of the events, in which default end points already exist and perfectivity is automatically denoted.



4.1.2 *Lεw45* and predicates without natural end points

The second piece of evidence which confirms that *lεw45* does not denote perfectivity is derived from its presence in predicates with no natural end points. This type of predicate refers to stative and activity predicates, the temporal property of which is illustrated in Figure 3. In this figure, the state/activity is illustrated by the line +++ and the reference time is illustrated by the symbol ♦. The line ~ ~ ~ shows the time before the event time.

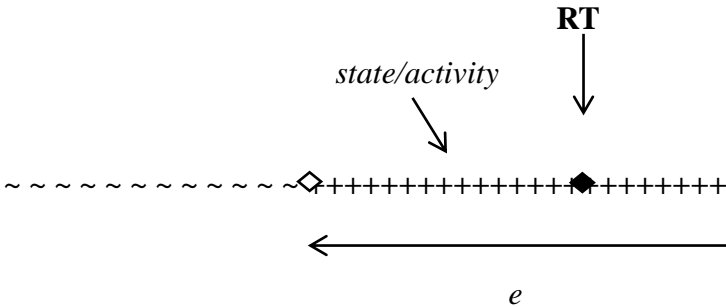


FIGURE 3. The temporal nature of predicates without natural end points

Unlike an achievement, a stative runs on the time line that overlaps the reference time and no definite end point is provided. Generally, *lεw45* is not added to a stative in order to report a state at the reference time. In the sentence in (189), for example, the predicate *nam45 rɔɔn45* 'the water is hot' asserts the current state of being hot of the water and denotes its imperfective aspect. The alternative marked with *lεw45* in (190) offers the same assertion as (189) does while at the same time highlighting the contrast between the state of the water not being hot prior to the reference time and the state of the water being hot at the reference time.

(189) *nam45 rɔɔn45*  
 water hot  
 'The water is hot.'

(190) *nam45 rɔɔn45 lεw45*  
 water hot PART  
 'The water is hot (previously it was not and we expected it would not become hot).'

Similar to the sentence marked with *lɛɛw45* in (190), in activity predicates such as the ones in (191) and (192) the end points of the events are not inherited. (191) can be interpreted either as generic or perfective while (192) does not confirm the perfectivity of the activity predicate. Either a perfective or an imperfective reading can be derived.

(191) da33nay33 waay42naam45

Danai swim

'Danai swims/swam.'

(192) da33nay33 waay42naam45 lɛɛw45

Danai swim PART

'Danai swam/is swimming (previously he did not swim and we expected that he would not swim).'

Similar to the sentence marked with *lɛɛw45* in (190), (192) provides neither the end point nor the termination of the event.

Boonyapatipark (1983) and Warottamasikkhadit (1976) in fact propose that the presence of *lɛɛw45* in a sentence suggests a change of state and that the event that causes a change normally begins and reaches its termination point before the reference time. Following this proposal, *lɛɛw45* marks a temporal boundary at the terminal part of the run time of the event and denotes its perfectivity. This leads to the conclusion that the perfective aspect necessarily coexists with *lɛɛw45*. Nevertheless, (190) and (192) have shown that the proposal is ruled out in the cases of stative and activity predicates where the presence of *lɛɛw45* does not reveal the perfective aspect of the predicates. Moreover, in such cases as (193) and (194) in which the precise reference times are established by the overt temporal adverbials, the terminations of the events are naturally realised and the perfective readings are derived. The presence of *lɛɛw45* would be redundant.

(193) khaw24 waay42naam45 mua42waan33nii45

he swim yesterday

'He swam yesterday.'

- (194) mɛɛ42 tham33 ʔaa33haan24 mɯa42 chua42moon33 thii42lɛw45  
 mum make food when hour last  
 'Mum cooked an hour ago.'

#### 4.1.3 *Lɛw45* and predicates with indeterminate end points

Predicates with indeterminate end points include incremental accomplishments, accomplishments with activities plus targets, and repetitive achievements. In these predicates, end points are not clearly determined, as illustrated in Figure 4. The line  $\diamond=====$  illustrates stages of an accomplishment/a repetitive achievement and the symbol  $\blacklozenge$  illustrates the reference time. The line  $~ ~ ~$  symbolises the time before the event time.

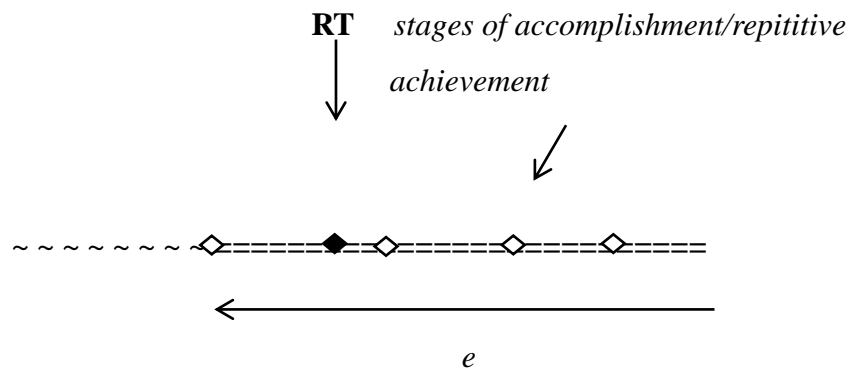


FIGURE 4. The temporal nature of predicates with indeterminate end points

Generally, an accomplishment verb contains both the starting and the end points of the event and suggests that the event starts and gradually proceeds for a certain period of time before it finally terminates. However, in Thai perfectivity is not overtly denoted in an accomplishment predicate (Koenig and Muansuwan 2005). For example, the accomplishment verb *la45laay33* 'to melt' suggests both the starting point of the event when the ice starts to transform to water and the end point when the ice is completely in the form of water. Nevertheless, as (195) shows, both generic and progressive/imperfective readings can be made. Even though the perfective aspect can be derived through the change of the state of the ice to water, an imperfective reading is also possible, as the predicate possibly presents the intermediate part of the event at which the event is still ongoing and only some parts of the ice has melted. Interpreting the sentence thus relies

heavily on pragmatic clues.

- (195) nam45khɛɛŋ24 la45laay33  
 ice melt  
 'Ice melts/The ice is melting.'

Like an accomplishment predicate, a repetitive achievement predicate presents the starting and end points of an event. The difference is that, the duration of the achievement covers only a very short period of time. An achievement, in addition, possibly occurs reiteratively and the entire event is composed of a series of achievement subevents. An example of a repetitive achievement is given in (196):

- (196) da33nay33 khɔ45 pra22tuu33  
 Danai knock door  
 'Danai knocked/knocks/is knocking at the door.'

Similar to states and activities, repetitive achievements do not present the explicit end point of an event. As a result, both a generic reading and a progressive/imperfective reading can be obtained.

- (197) da33nay33 pay33 rooŋ33rian33  
 Danai go school  
 'Danai (normally) goes/is going to school.'

(197) exemplifies an accomplishment predicate, which is composed of an activity and a target. Generally, in a predicate of this type, the activity representing the initial part of the whole event continues along the run time up to the point where the target is accomplished. Accordingly, the perfective reading of the whole event is true if and only if the existence of the target is realised. However, despite the presence of a target, this is not always the case. Suppose the reference time in (197) is NOW; the existence of the target and the end point are not confirmed. The reason is that, *school* possibly describes the characteristic of the activity *to go* and does not act as the target of the activity. Thus, either a generic reading or a progressive/imperfective reading is possibly derived.

The addition of *lɛɛw45* to the predicates without a determinate end point, however, neither helps identify a clear termination point nor indicates the completion of the whole events. (198), (199) and (200) exhibit this fact.

(198) da33nay33 pay33 rooŋ33rian33 lɛɛw45

Danai go school PART

'Danai has gone to school (previously he did not start his journey to school and we expected that he would not make the journey).'

(199) da33nay33 khɔ45 pra22tuu33 lɛɛw45

Danai knock door PART

'Danai has knocked at the door (previously he did not knock at the door and we expected that he would not do it).'

(200) nam45khɛɛŋ24 la45laay33 lɛɛw45

ice melt PART

'The ice has started to melt (previously it did not melt and we expected that it would not melt).'

In (198), it is not clear whether the event already terminated before the reference time because the end point is indeterminate. The presence of *lɛɛw45* does not confirm the termination and the perfective aspect of the event unless the presence of Danai at the school is experienced. This suggests that the reference time can be established either at the initial or the terminal part of the run time of the entire event. Consequently, either an imperfective reading or a perfective reading is possibly derived. The same phenomenon also prevails in (199) and (200). Both Boonyapatipark (1983) and Kullavanijaya and Bisang (2004) propose that when occurring in an accomplishment, *lɛɛw45* sets a time boundary which marks either the initial or the ending part of the event. They also suggest that the interpretation for the exact temporal readings of the predicate relies on the part of the event that *lɛɛw45* interacts with. However, the examples given in this section clearly indicate that both the marked sentences above and their unmarked counterparts in (195), (196), and (197) have common temporal properties. Therefore, the presence of *lɛɛw45* does not have any impact on the temporal properties, as suggested by these past studies.

#### 4.1.4 *lɛw45* and predicates with ongoing and future run times

The last piece of evidence that supports the argument against the claim that *lɛw45* is a perfective aspect marker lies in the sentences where *lɛw45* co-occurs with ongoing and future predicates.

##### *lɛw45* AND ONGOING PREDICATES

In Thai, the ongoing nature of an event is denoted by the addition of the progressive/imperfective aspect marker *kam33laŋ33*. Commonly, a combination of *kam33laŋ33* and *lɛw45* is possible, as pointed out by Kullavanijaya and Bisang (2004). What makes this combination interesting is the composition of the predicate, which seems to allow an intermingling between the imperfective aspect, which is represented through *kam33laŋ33*, and the perfective aspect, which is designated through *lɛw45*. Consider the minimal pair in (201) and (202):

(201) *maa45 kam33laŋ33 wiŋ42*  
 horse PROG run  
 ‘The horse is running.’

(202) *maa45 kam33laŋ33 wiŋ42 lɛw45*  
 horse PROG run PART  
 ‘The horse is running (previously it was not running and we expected that it would not run).’

Both (201) and (202) relate to a definite horse and its action. In the unmarked alternative in (201), the temporal property of the event *maa45 wiŋ42* or *run (the horse)* is determined by *kam33laŋ33*, which generally denotes the progressiveness/imperfectiveness of an event. It denotes durativity and suggests that the run time of the event overlaps the reference time. In an event where the reference time overlaps the utterance time, *kam33laŋ33* conveys the present progressiveness of the event and the end point of the event is not determined. In (202), the sentence reports the event as a fact. The temporal nature of ongoing predicates is summarised in Figure 5, in which the line +++ illustrates a predicate marked by *kam33laŋ33* and the reference time is illustrated by the symbol ◆. The line ~ ~ ~

illustrates the time before the event time.

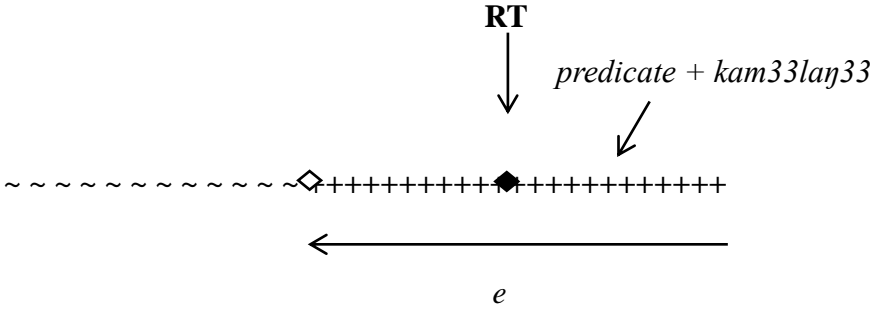


FIGURE 5. The temporal nature of ongoing predicates

An important issue concerning the different functions of the two alternatives arises from the above minimal pair. Suppose the speaker is experiencing the event *run (the horse)* at the utterance time; he can simply narrate it by uttering (201). By so doing, the progressiveness, as well as the imperfective aspect of the event, is still successfully conveyed to the hearer. In this case, the zero-marked alternative in fact offers a more economical way of communication. Adopting this alternative the speaker aims to report the event as a fact.

Considering the alternative marked with *leeW45* in (202), the co-occurrence of *kam33lan33* and *leeW45* gives the impression that perfectivity and imperfectivity co-exist, which is quite unusual and unnatural logically. However, in fact perfectivity is not generated at all. Despite the presence of *leeW45*, the ongoing nature of the event still prevails and the progressive/imperfective reading can still be derived. The use of the alternative marked with *leeW45* indicates that the speaker intends to emphasise the contrast between the states of the horse running and not; the animal is no longer in the state of not running as expected but is currently in the state of running.

*leeW45* AND FUTURE PREDICATES

In Thai, the futurity of an event is expressed through the future time marker *ca22*, as shown in (203):

- (203) maa33lii33    ca22    suu45    baan42
- Malee        FUT     buy     house
- 'Malee will buy a house.'

The event time of the action of buying a house is posterior to the utterance/reference time which, in this case, is presumed to be NOW. The general temporality of a future event is illustrated in Figure 6. In this figure, the line ~ ~ ~ symbolises the time before the event time while the symbol  $\diamond$  illustrates the utterance time. The predicate marked with *ca22* is illustrated by the line +++.

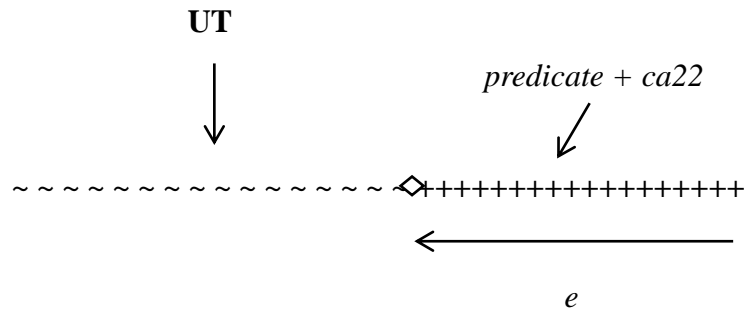


FIGURE 6. The temporal nature of future predicates

According to Kullavanijaya and Bisang (2004), when *lɛɛw45* co-occurs with the future time marker *ca22*, it operates in the future run time. It marks a temporal boundary at the initial part of the event, which will take place in the very near future or right after the utterance time. Accordingly, the immediate futurity, not the past, of the event is suggested. This claim also holds in the situation in which there is evidence that suggests the immediate occurrence of the event. An example is provided in (204):

- (204) fon24 ca22 tok22 lɛɛw45  
rain FUT fall PART  
'It's going to rain.'

The speaker that utters (204) is possibly seeing heavy rain clouds, which are very good indicators of rain in the immediate future. However, the claim made by Kullavanijaya and Bisang does not hold in cases like (205):

- (205) pii33 naa42 maa33lii33 ca22 sɯu45 baan42 lɛɛw45  
year next Malee FUT buy house PART  
'Next year Malee will buy a house (previously before the utterance time Malee did not have a plan to buy a house and we expected she would not buy one).'



It is not clear what the distance between the utterance/reference time and the event time in the future is. Also, it is possible that from the speaker's point of view *next year* is not considered the immediate future. Moreover, in such an epistemic predicate, there is a possibility that in the end the event will not happen at all. These possibilities indicate that the combination of *lɛw45* and *ca22* does not always denote the near futurity of the event.

#### 4.1.5 The presence of *lɛw45* at the discourse level

The argument against the conventional claim about the role of *lɛw45* made previously is drawn from the data collected in the form of isolated sentences. However, puzzles over the role and the importance of *lɛw45* do not lie in this kind of data alone. The use of *lɛw45* in some particular contexts at the discourse level even offers another puzzle, which seems to be more subtle than the issue concerning temporality. Consider (206):

(206) Context: Sutha and Sunan bought a goldfish from a local pet shop. At the time of purchase the animal looked very healthy. The next morning, unfortunately, Sunan found it dead in the tank. Sutha does not know about this tragic incident.

Sutha: pay33 haay42 ʔaa33haan24 plaa33thɔŋ33 kan33thəə22  
 to go give food goldfish let us  
 'Let's go feed the goldfish.'

Sunan: plaa33thɔŋ33 taay33 lɛw45  
 goldfish die PART

'The goldfish died (previously it was alive and we expected that it would not die).'

Apart from signalling the two contrasting states of the goldfish—being alive and being not alive or dead—*lɛw45* also implies the expectation that before the event *die(the fish)* took place there was an expectation that the goldfish would be alive. However, such an expectation is in contrast with the asserted proposition, which displays the altered state of being dead of the goldfish. Interestingly, the unmarked alternative, *plaa33thɔŋ33 taay33*, is infelicitous in this case.

The examples in the preceding sections have shown that *lɛw45* does not affect the temporal properties of the event. They also lead to speculation about the possibility that

both the zero-marked alternatives and the alternatives marked with *lɛɛw45* can be used interchangeably. Nevertheless, the dialogue in (206) offers another example indicating that in fact in some particular contexts one alternative is selected while the other is rejected.

All of the phenomena of *lɛɛw45* observed in the counter-examples lead to three significant points regarding the conventional claims that *lɛɛw45* marks the perfective aspect or the completion of an event. First, *lɛɛw45* does not necessarily mark the end point of an event; it does not occur merely in the predicates in which the events had already ceased at a point prior to the reference time. Its presence is also acceptable both in predicates with ongoing events and in predicates with future events. In addition, it does not establish the terminal point in predicates with no default end point and does not always denote the completion of the events in predicates with indeterminate end points. Secondly, *lɛɛw45* does not affect the readings of those sentences containing achievements and accomplishments with serial resultatives and those with overt past-time adverbials. Moreover, *lɛɛw45* does not have any effects on temporality in predicates in which it combines with the progressive/imperfective aspect marker *kam33lan33* and the future marker *ca22*. Finally, the comparison between the alternatives marked with *lɛɛw45* and the unmarked alternatives suggests that both varieties denote the same temporal properties of the events. However, while the unmarked alternative reports a fact, the alternative marked with *lɛɛw45* particularly emphasises on the contrast of the two states of the issue being discussed.

#### 4.2 *Lɛɛw45* AS A MARKER OF COUNTER-EXPECTATION

When *lɛɛw45* is present, the expectation which is derived before the reference time contradicts the asserted proposition, resulting in a counter-expectation. The illustration of this phenomenon is exhibited through the production process of the restated sentence in (207).

(207) *plaa33thooŋ33 taay22 lɛɛw45*  
 goldfish die PART

'The goldfish died (previously it was expected to be alive).'

The expression of (207) involves a particular context established before the event *die* (*the goldfish*) takes place. In this context, there was a unique goldfish which was mutually

known by the speaker and the hearer. It was in good health and no one ever expected that it would die. Unfortunately, a tragic incident happened to it; let us say, it was overfed. Overfeeding caused fatal gastro-intestinal damage which made the goldfish die prematurely. The speaker assumes that this new information contradicts the previous expectation regarding the state of the goldfish held by the hearer, whose knowledge concerning the goldfish has not been updated. In order that her intention to convey the new information which opposes the expectation be fulfilled, *lɛɛw45* is thus added in order to recall the expectation created prior to the reference time. At the same time the presence of *lɛɛw45* denotes the contrast between the expectation and the asserted proposition, which is, in this case, the altered state of the issue under discussion at the reference time. The entire production process for the alternative marked with *lɛɛw45* in this situation is summarised in Figure 7. The line ~ ~ ~ symbolises the time before the reference time when the expectation that the goldfish would be alive holds. The achievement predicate die (goldfish) is illustrated by the line +++ while the line ----- illustrates the altered state of the goldfish being dead. The reference time is illustrated by the symbol .

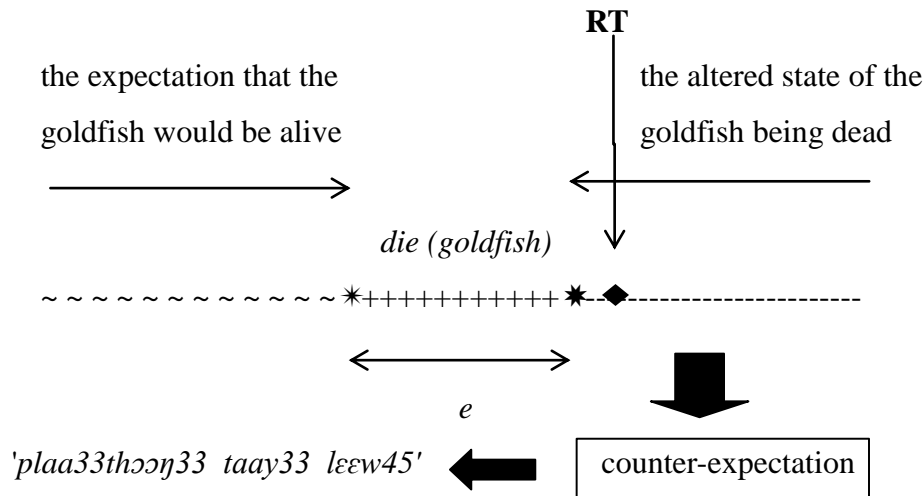


FIGURE 7. The production process for the alternative marked with *lɛɛw45*

Apart from triggering the expectation concerning the state of the issue under discussion before the reference time, the presence of *lɛɛw45* suggests that the common ground that the interlocutors share needs to be updated so that the conversation can be continued without confusion. The unmarked alternative of the same utterance, on the other hand, does not trigger the expectation nor does it imply the correction of the common ground knowledge.

In some cases, the counter-expectation marked by *lɛɛw45* depicts the speaker's surprise or mirativity. According to Delancey (1997), old information depicts a picture of the issue under discussion in the speaker's world and suggests the belief of the speaker regarding it. In contrast, new information represents the part of the information about the issue that has not been incorporated into the picture in the speaker's world. Such contradiction between old and new information represents mirativity, which denotes the presence of the unexpected information (Egerod and Hansson 1974). However, the counter-expectation marked by *lɛɛw45* is not restricted to the situation in which the speaker is the person that holds the presuppositional belief and thus not to the speaker's surprise. The particle can be used regardless of the participant that holds the belief. As (208) shows, the expectation concerning the state of the goldfish before the reference time is not shared by all participants in the conversation. Furthermore, it is in fact difficult to detect whether the speaker holds it or whether she is surprised at what has happened to the goldfish.

(208) Sutha: plaa33thɔɔŋ33 taay22 lɛɛw45

goldfish die PART

'The goldfish died (previously it was alive and was expected not to die afterwards).'

Thida: pen33pay33may42day42

impossible

'That's impossible!'

Malee: may42 plɛɛk22cay22 ləəy33

NEG be surprised at all

'I'm not surprised at all.'

Owing to the differences between the unmarked sentence and the sentence marked with *lɛɛw45*, there are cases where the latter is obligatory while the former is unacceptable. The short dialogues in (209), (210), and (211) exemplify the situations which prefer the alternatives marked with *lɛɛw45*.

- (209) Sutha: haay42 ʔaa33haan24 plaa33thoŋ33 kan33thə22  
 give food goldfish let us  
 'Let's feed the goldfish.'
- Sunan: plaa33thoŋ33 taay33 læw45 (\*plaa33thoŋ33 taay33)  
 goldfish die PART  
 'The goldfish died (previously it was alive and was expected not to die afterwards).'
- (210) Sutha: plaa33thoŋ33 too33 khun42 maak42 chay42may45  
 goldfish grow up a lot QW  
 'The goldfish has grown a lot, right?'
- Sunan: plaa33thoŋ33 taay33 læw45 (\*plaa33thoŋ33 taay33)  
 goldfish die PART  
 'The goldfish died (previously it was alive and was expected not to die afterwards).'
- (211) Sutha: thəə33 naa42 ʔaw33 plaa33thoŋ33 pay33 pra22kuat22  
 you should take goldfish go contest  
 'You should enter the goldfish in the contest.'
- Sunan: plaa33thoŋ33 taay33 læw45 (\*plaa33thoŋ33 taay33)  
 goldfish die PART  
 'The goldfish died (previously it was alive and was expected not to die afterwards).'

In all of the three example cases above, the antecedents uttered by Sutha indicate his expectation that the goldfish is still in the state of being alive at the reference times when the conversations take place. However, in each situation the expectation is invalid at the reference time. Therefore, a counter-expectation is needed so that the invalid expectation can be replaced with the correct, new information. Due to the necessity of a correction, the unmarked alternative does not satisfy the intention of the speaker and is not selected.

Now let us consider another situation shown in (212). The absence of the expectation concerning the state of the issue under discussion, in contrast, results in the selection of the zero-marked alternative and the rejection of the alternative marked with

*lɛɛw45*. The utterance with the unmarked alternative suggests that the speaker assumes that the hearer does not have any expectation concerning the state of the issue under discussion and that supplying the new information by pointing out the contrast between the expectation and the state of the issue under discussion at the reference time is redundant. Conveying the information by means of a fact report is sufficient.

(212) Context: Sutha does not know that Sunan has pets. He saw her crying yesterday and wondered what had happened to her. Today he meets her so he asks her about her crying.

Sutha: mɯa42waan33 thəə33 rɔŋ45haay52 tham33may33

yesterday you cry why

'Why were you crying yesterday?'

Sunan: plaa33thɔŋ33 thii42 lian42 taay33 (\*plaa33thɔŋ33 taay33 lɛɛw45)

goldfish REL raise die

'The goldfish died.'

It is important to address the issue concerning verum focus here as all of the examples given so far might cause speculation that *lɛɛw45* marks a verum focus rather than a counter-expectation. A comparison between *lɛɛw45* and *taan22haak22* or 'instead', which is used to deny a belief, proves that *lɛɛw45* denies an expectation, not a belief, and is thus a marker of counter-expectation. This is shown in (213) and (214) below:

(213) Context: Sutha thinks that the flight from Bangkok to London takes 10 hours but in fact it takes 13 hours.

Sutha: thiaw42bin33 pay33 lɔn33dɔn33 chay45 wee33laa33 sip22

flight go London use time ten

chua42moon33

hour

'A flight to London takes ten hours.'

Sunan: khray33 bɔɔk22  
 who tell  
 man33 chay45 wee33laa33 sip22saam24 chua42moon33  
 it use time thirteen hour  
 taan22haak22/\*lɛɛw45  
 PART PART  
 'Who told you? It takes thirteen hours.'

(214) Context: Normally, a daily newspaper is delivered by Danai at 8 am. This morning it was delivered earlier than usual at 7.30 am. Suwat did not know this and still expected that Danai would come at 8am. He has waited for Danai and the newspaper until now at 8.10 am.

Suwat: tham33may33 nan24suu24phim33 yan33 may42 maa33  
 why newspaper still NEG come  
 'Why hasn't Danai come?'

Malee: nan24suu24phim33 maa33 lɛɛw45/\*taan22haak22  
 newspaper come PART  
 'The newspaper has been delivered (previously you expected it would be delivered at 8 am as usual).'

In (213), Sunan's utterance is aimed at rejecting Sutha's belief about the duration of a flight from Bangkok to London. While *lɛɛw45* is unacceptable in this situation, *taan22haak22* is obligatorily used in order to deny the false belief. In contrast, in (214) what is denied is Suwat's expectation before the reference time—8.10 am in this situation—that the newspaper would be delivered at 8 am.

Another interesting example that distinguishes the denial of expectation marked by *lɛɛw45* from the denial of belief marked by *taan22haak22* is given in (215).

(215) Context: Suppose there is a man that enters a district hospital every day. Malee has always believed that he is a doctor. However, Sutha, who works at the hospital, knows that in fact the man is a dentist. He is aware that Malee has a false belief about the man's occupation. He then wants to give her the correct information. Therefore, he utters:

khaw<sup>24</sup> pen<sup>33</sup> mɔɔ<sup>24</sup>fan<sup>33</sup> taŋ<sup>22</sup>haak<sup>22</sup>  
 he COP dentist PART  
 'He is a dentist (not a doctor)!'

In the case above, obviously there is an interaction between the two bits of information regarding the occupation of the man: *mɔɔ<sup>24</sup>* 'doctor' and *mɔɔ<sup>24</sup>fan<sup>33</sup>* 'dentist'. The former represents the wrong information about the man which exists in Malee's belief. The latter represents the new, correct information, which is based on the fact about the man. This piece of new information suggests that a correction should be made in Malee's common ground. Sutha's utterance is thus aimed at fine tuning the common ground about the man that both he and Malee are supposed to share.

The use of the particle *taŋ<sup>22</sup>haak<sup>22</sup>* shows that the new information offered by Sutha does not refer to the expectation that is drawn from the state of the man experienced before the reference time. Rather, it is induced by Malee's wrong assumption, which is in opposition to the fact about the man. The use of *lɛw<sup>45</sup>*, nonetheless, is felicitous under the context of, for example, a theatrical transformation, that is, a transformation of a stage performer in a musical from a doctor to a dentist, as shown in (216). In this context, the expectation that the man was once in the state of being a doctor is valid before the reference time. His becoming a dentist is an altered state of himself which is a consequence of an event that takes place prior to the reference time.

(216) khaw<sup>24</sup> pen<sup>33</sup> mɔɔ<sup>24</sup>fan<sup>33</sup> lɛw<sup>45</sup> (may<sup>42</sup>chay<sup>42</sup> mɔɔ<sup>24</sup>)  
 he COP dentist PART (NEG doctor)  
 'He has become a dentist (previously he was in the state of being a doctor and we expected that he would be in this state afterwards).'

The comparison between *lɛw<sup>45</sup>* and *taŋ<sup>22</sup>haak<sup>22</sup>* in terms of their meaning and use will be fully discussed in Chapters 5 and 6.

Following the idea that verum focus represents polarity contrast (Vallduví and Vilkuña 1998 and Henry et al. 2008), the comparison has shown that *lɛw<sup>45</sup>* is too weak to induce verum focus. In fact, it is *taŋ<sup>22</sup>haak<sup>22</sup>* that induces it.

Another reason that suggests that *lɛw<sup>45</sup>* does not mark verum focus is that *lɛw<sup>45</sup>* is allowed in contexts in which no target proposition is raised in the preceding utterance. Consider (217):



(217) Context: Charlie and Siree know about Danai's cherished goldfish. Unfortunately, this goldfish died a short time ago. Charlie does not know about this yet. One day he meets Siree and asks a general question:

Charlie: mii<sup>33</sup> khaaw<sup>22</sup> ?a<sup>22</sup>ray<sup>33</sup> baan<sup>42</sup>  
 have news what any  
 'So what else is new?'

Siree: plaa<sup>33</sup>thooŋ<sup>33</sup> taay<sup>33</sup> lɛw<sup>45</sup>  
 goldfish die PART  
 'The goldfish died (previously this goldfish was in the state of being alive and was expected to be alive afterwards)!'

In this case the entire utterance of Siree represents a neutral focus because no proposition is raised as a possibility in the open question asked by Charlie. *lɛw<sup>45</sup>*, unlike the situation in (215), is allowed to appear in this case because both the existence of the goldfish and the expectation that it would be alive entered the common ground via previous discourses. The occurrence of *lɛw<sup>45</sup>* is also possible in out-of-the-blue cases which will be discussed later in this chapter.

Another related issue that should be discussed here is the specificity of the subject; *lɛw<sup>45</sup>* allows only specific subjects. Thus, it is unacceptable inthetic sentences such as (218).

(218) Context: Sutha is organising a concert of Thai traditional music. Normally young people are not fond of this kind of music. Sunan knows about this fact.

Sunan: kəət<sup>22</sup> ?a<sup>22</sup>ray<sup>33</sup> khun<sup>42</sup>  
 happen what up  
 'What happened?'

Sutha: way<sup>33</sup>run<sup>42</sup> maa<sup>33</sup> faŋ<sup>33</sup> kən<sup>33</sup>səət<sup>22</sup> laay<sup>24</sup> khon<sup>33</sup> ləy<sup>33</sup>/\*lɛw<sup>45</sup>  
 teenager come listen concert many CLASS PART PART  
 'Lots of teenagers attended the concert!'

Moreover, the subject in a sentence marked with *lɛw<sup>45</sup>* is always specific and acts as the issue under discussion. On the other hand, the subject in an unmarked alternative is not

restricted to a specific NP. *lɛɛw45* is not allowed in a sentence that has a non-specific NP as the subject. This is shown in (219):

- (219) (mii33) chaay33 khon33 nɯŋ22 haay24 pay33/\*lɛɛw45  
 (have) man CLASS one miss go PART  
 'There is a man who is missing.'

In the above situation, the subject—the non-specific *man*—is a new entity which has never been placed in the common ground. Therefore, there is no established proposition that *lɛɛw45* can take, and making a counter-expectation is not possible. What the sentence asserts is only a factive report. In addition, counter-expectation marked by *lɛɛw45* necessarily involves the contrastive interaction between the asserted state of the issue under discussion and the previous expectation about it. Interestingly, the presence of *lɛɛw45* is acceptable if the non-specific NP in (219) is transformed to a specific NP by means of switching the positions of the classifier *khon33* and the numeral *nɯŋ22*, as shown in (220).

- (220) (mii33) chaay33 nɯŋ22 khon33 haay24 pay33 lɛɛw45  
 (have) man one CLASS miss go PART  
 'One man (among those we know) is missing (previously he was not missing and we expected that he would not be missing).'

### 4.3 THE NATURE OF THE ANTECEDENT AND THE PRAGMATIC PROPERTIES OF *lɛɛw45*

In this section, the criteria proposed by Zeevat (2002), which are used to check the pragmatic properties of discourse particles in general, will be employed. The investigation into the nature of the antecedents of *lɛɛw45* is assumed to reveal other pragmatic properties of the particle.

#### ACCESSIBLE ANTECEDENTS

Basically, an insertion of *lɛɛw45* into a sentence is possible when it is preceded by an accessible antecedent in which the saliency of the issue under discussion is overtly indicated. This is shown in (221):

(221) Sutha: cam33      maa45 thii42 puay22 day42 may45  
 remember horse REL sick can QW  
 'Do you remember the sick horse?'

Sunan: cam33      day42 tham33may33 rəə24  
 remember can why QW  
 'Yes, I do. Why?'

Sutha: tɔɔn33nii45 man33 dəən33 day42 lɛɛw45  
 now it walk can PART  
 'It can walk now (previously it was sick and could not walk and we did not expect that it would be able to walk).'

The saliency of the horse under discussion can be traced through Sutha's first utterance, which serves as the antecedent to his second utterance. The reintroduction of the sick horse in the antecedent urges Sunan to retrieve the information on the horse in the common ground, which includes the expectation that the animal would not recover and would not be able to walk. The pronoun *man33* 'it' in Sutha's second utterance can thus be fully resolved through the accessible part of the context established in the antecedent. The availability of an accessible antecedent exemplified through this case shows that *lɛɛw45* allows a full resolution.

#### INACCESSIBLE ANTECEDENTS

*Lɛɛw45* also allows an inaccessible antecedent or an antecedent in which the saliency of the issue under discussion cannot be traced directly. The reference to the issue under discussion is made through the interaction among parts of the information available in the current discourse, as shown in (222):

(222) Sutha: wan33nii45 chaw33baan42 dii33cay33 maak42  
 today villager delighted very  
 'Today the villagers were very delighted.'

Sunan: tham33may33 rəə24  
 why QW  
 'Why?'

Sutha: khon33raay45 thuuk22 tam33ruat22 cap22 daay42 lɛɛw45  
 thief PASSIVE police capture successfully PART  
 'The thief was captured by the police (previously this thief was on the run  
 and was not expected to be captured by the police).'

Sutha's second utterance, which is marked with *lɛɛw45*, triggers the expectation that the thief would not be captured by the police. Unlike (221), however, neither the saliency of the thief nor the expectation concerning his state before the reference time were not explicitly identified in the antecedent represented by Sutha's first utterance at all. Yet, this antecedent indirectly enables Sunan to recognise the existence of the unique thief in this context. The delight of the villagers, which is stated in Sutha's first utterance, is caused by the successful capture of the thief by the police, which is stated in Sutha's second utterance. The interaction between these two pieces of information provides an indirect link to the thief under discussion. This example case proves that *lɛɛw45* also allows partial resolution of the issue under discussion.

NO ANTECEDENT

*lɛɛw45* can also appear in utterances made out of the blue as exemplified in (223):

(223) Sutha: caw42naa42thii42 laa33ʔɔk22 caak22 ŋaan33 lɛɛw45  
 officer resign from job PART  
 'The officer quit his job (previously he was expected to continue doing it).'

Sunan: pen33pay33may42day42  
 impossible  
 'That's impossible!'

In (223), no antecedent is provided. Nevertheless, it does not cause any impediment to the hearer's apprehension of the speaker's utterance. The presence of *lɛɛw45* in Sutha's utterance establishes the definiteness of the issue under discussion, that is, one particular officer already existing in the common ground. It also triggers the expectation concerning the officer that he would continue doing his job. Inserting *lɛɛw45* into the utterance, Sutha aims at pointing out to Sunan the contrast between the expectation and the current state of the officer. As for Sunan, *lɛɛw45* signals her that the officer under discussion is not any

other officer but the one that already exists in the common ground and that was expected previously to continue his job. (223) shows that the use of *leew45* in out-of-the-blue cases facilitates accommodation.

Another issue that concerns the use of *leew45* is the sharing of the expectation regarding the issue under discussion derived before the reference time among the parties involved in the conversation. (221) indicates that both the speaker and the hearer expected that the sick horse would not recover and would not be able to walk. The addition of *leew45* to the utterance thus, besides the speaker's aim to mark a counter-expectation, relates to mirativity or the speaker's surprise. However, in cases such as (222) and (223), the speaker does not share the expectation. In (222), that the thief would not be captured by the police is expected by the villagers and in (223) it is the hearer that expected that the officer would not quit his job. Therefore, in (222) and (223) the presence of *leew45* denotes the opposition to the expectations of the villagers, who represent the third party in the conversation, and the hearer, respectively. The phenomena seen in (221), (222), and (223) indicate that when *leew45* is used in a particular situation, it does not matter which party in the conversation has the expectation regarding the issue under discussion.

#### 4.4 CONCLUSION

This chapter has shown that the conventional claims that *leew45* primarily marks the perfective aspect and the completion of an event need to be revised. The argument is supported by a number of counter-examples, in which *leew45* does not perform this role in temporality and does not yield any effects on the temporal properties of the predicates. Regardless of the type of predicates in which *leew45* appears, the particle does not generate perfectivity, nor does it suggest a past reading, as claimed in the past studies. The temporal property of a predicate is generally attributed to the temporal elements, including the lexical aspect of the VP and the time expression used to specify the reference or utterance time. With further analyses of the raw data, *leew45* can be regarded as a particle and is claimed to play a main role as a marker of counter-expectation. A counter-expectation marked by *leew45* demonstrates a contradiction between the expectation proposition and the asserted proposition. In the mechanism of counter-expectation, the expectation proposition triggered by *leew45* plays a crucial part as the contrastive proposition against the assertion. The analyses based on real conversational settings suggest that the expectation proposition presupposed by *leew45* is found to represent the speaker's

assumption, which is epistemic and is likely to be active beyond the scope of the semantic account. The use of *leew45* is not restricted by the accessibility of the antecedent. The presence of *leew45* is acceptable both with an accessible or inaccessible antecedent. Moreover, the use of the particle when the antecedent is absent is felicitous, as it facilitates accommodation. These are only preliminary findings on the true role of *leew45* and its mechanism of counter-expectation. Before finding a systematic way to explain the operation of *leew45*, first of all, this presupposition, i.e. the expectation proposition triggered by it, should be inspected. This task is carried out in Chapter 5.

## Chapter 5

### The Implications *leew45* as Projective Content

As shown in Chapter 4, *leew45* co-occurs with both perfective and imperfective predicates, and the addition of it is not aimed at denoting the perfective aspect but at marking a counter-expectation. *leew45*'s counter-expectation is derived through a contrast between the two states of the issue under discussion; the state of the issue under discussion which forms an expectation before the reference time contrasts the state of the same issue under discussion asserted at the reference time. Chapter 4 has also revealed that the presence of *leew45* in a sentence implies the existence of an expectation. This chapter will focus on the analysis on *leew45*'s implications; that is, whether they are presuppositional in a classical sense. This issue is fundamentally crucial, as the findings will direct us to a proper explanation of the operation of *leew45*.

In order to appraise the status of *leew45*'s implications, some systematic tests are employed. These include the traditional presupposition tests as provided by Levinson (1983), the tests using the family of sentences as used in the Presupposition Test Battery created by Geurts (1999), and the projection tests recently developed by Tonhauser et al. (2013), which emphasise the interactions between the implication triggers and context. The results from the Presupposition Test Battery and Levinson's presupposition tests reveal that the implications of *leew45* survive in all variants of sentences. Nevertheless, it is notable that they disappear in an interrogative sentence and a negative sentence in which negation scopes at the local level over the VP. The results from Tonhauser et al.'s tests in general indicate that *leew45*'s implications are projective and impose a Strong Contextual Felicity constraint, which requires that the particle be used in the contexts that entail its implications. They also reveal the disappearance of the implications in a negation. Intriguingly, the tests show that *leew45* is in fact not bound to Obligatory Local Effect which checks the persistence of the implications when the implication triggers interact with sentence operators. The implications of *leew45* do not sustain when the particle is embedded under the scope of verbs of attitude where the implications are not entailed. Based on the results from these tests, the current study concludes that *leew45*'s implications do not behave in accordance with the traditional concept of the presupposition.

In Section 5.1, various issues concerning presuppositions including the standard concept of a presupposition and the projection problem are discussed. *leew45*'s implications are defined in Section 5.2, while their status as presuppositions is appraised in Section 5.3.

## 5.1 PRESUPPOSITION

This section is dedicated to the idea of the presupposition. It is aimed at providing knowledge on this topic that will be useful when assessing the implications of *leew45*. It will first address the definitions of a presupposition that have been proposed and discussed since the time of Frege. Then, it will talk about some distinctive properties of presuppositions before addressing in the final part the semantic and pragmatic approaches that are created to explain the behaviour of presuppositions.

### 5.1.1 Early discussions of presupposition

A presupposition seems to play a great role when communication is carried out in a linguistic form. Consider (224):

(224) Danai's sister is a vet.

Apparently, the speaker of this utterance has the main aim to inform the hearer about the sister of Danai, i.e. that she works as a vet. However, in order for the utterance to satisfy this aim of the speaker, there is the foremost need that the subject *Danai's sister* be defined. According to (224), it is clear in this situation that Danai has a sister. This bit of information does not comprise the main message that the speaker wants to convey; it is what the utterance presupposes. More importantly, it is the prerequisite component of the utterance. The sentence would not have been uttered had Danai's sister not existed.

The above simple example which contains a presupposition seems to echo what Frege (1892 (1952)) proposes. According to him, the presupposition that a particular proper name has a reference can be traced if an assertion about the person that bears that name is made. Though Danai's sister is not a proper name, it certainly refers to a female person that is the sister of Danai. If (224) is converted into its negative form as shown in (225), interestingly, the presupposition about the existence of Danai's sister still prevails.

(225) Danai's sister is not a vet.

The negation does not diminish the existence of Danai's sister. In fact, like (224), the sentence still presupposes that Danai has a sister. The two forms of this sentence share the



same presupposition. Moreover, this sentence cannot be uttered and its truth value cannot be determined unless that Danai has a sister is true.

What has been pointed out from (224) and (225) corresponds to Frege's theory of presuppositions. Presupposition facilitates reference identification. In addition, the presuppositions in these two example sentences are not affected by negation; they persist even when the sentence is negated. Lastly, they must be true or satisfied in order for the sentence or the assertion to be judged as true or false.

The last qualification of a presupposition proposed by Frege leaves room for speculation concerning whether it is really necessary that the presupposition be true or satisfied. The reason is that, the hearer of (224) possibly opposes the presupposition that Danai has a sister by uttering (226):

(226) Does Danai have a sister? I've never heard so.

(226) seems to suggest that the status of the presupposition being true is actually based on the assumption of the person that expresses it. This assumption is twofold. First, it is probably made in accordance with what the speaker of (224) understands. The lady she refers to might not be Danai's sister but she misunderstands that she is. Secondly, she assumes that the hearer already learned that Danai has a sister. As a consequence, the hearer's reply might suggest either the misunderstanding of the speaker or the outdated knowledge on her part. No matter what situation the dialogue is based on, Frege's presupposition theory does not state clearly if presuppositions are formed purely by the semantic properties of the constituents that comprise the sentence or whether they are dependent upon the assumption and intention of the speaker.

The importance of presuppositions in judging the truth value of the sentence is repeated by Strawson (1952). He proposes that if a sentence A presupposes another sentence B, it is required that B be true in order for A to receive the truth-value. Following this idea, it means that no matter what truth value the sentence A carries—either true or false—it is necessary that B be true. Accordingly, B must be detected both in the affirmative and negative versions of a sentence. Strawson's view of presuppositions, like Frege's, cannot tackle the problem concerning the speaker's assumption mentioned in the previous paragraph. In addition, it does not efficiently encounter the ambiguities caused by negation.

Reconsidering (225), it is not quite clear what is being negated—the existence of Danai's sister or the sister being a vet. As Russell (1905) points out, such a problem arises from scope ambiguities. Negation probably rejects either the reference or the property of the reference. Russell proposes that in order to clarify ambiguities, the definite descriptions present in the sentence need to be decomposed. However, Strawson argues that the decomposition of definite descriptions cannot be applied to many cases in real contexts. In such contexts, a statement, not a sentence, is judged as true or false. In addition, it is possible that a statement is true at one point of time but is false at another. The reason is that, the definite descriptions might hold only occasionally and only under certain circumstances. Considering (224), the statement is possibly true now and was false thirty years ago when Danai's sister was not born yet and of course was still far from becoming a vet. The judgement of the truth value of a statement, according to the argument made by Strawson, thus depends on the availability of the background information that is required in order for the statement to be made and judged. Russell's idea does not account for such a need for background information.

The discussions that have been offered so far present the very early state of presuppositions. The ideas from both sides—Frege/Strawson and Russell—still do not account for the emergence of presuppositions in real contexts, especially those that indicate the impact of the assumptions made unilaterally by the speaker.

### **5.1.2 Properties of presupposition**

Presuppositions have two properties, which include constancy under negation and defeasibility or cancellability. The first property, constancy under negation, suggests that the existence of a presupposition in a sentence is not affected by negation. Both the affirmative (227) and its negative counterpart in (228) attain the presupposition in (229):

(227) The daffodils in the garden are in full bloom.

(228) The daffodils in the garden are not in full bloom.

(229) There are daffodils in the garden.

The constancy under negation indicates that a sentence A presupposes another sentence B if and only if:

(230) If A is true, then B is true.

(231) If A is false, then B is true.

This concept of a presupposition drawn from its persistence under negation clearly corresponds to Strawson's concept of presuppositions mentioned earlier. However, this property still gives rise to some problems. The first problem, which has already been discussed, involves the ambiguities caused by the lack of a clear determination of scope over which negation operates. Another problem, as Levinson (1983) points out, arises from the fact that in some types of sentences, constancy under negation is not a good criterion to indicate that a presupposition is prevalent. This is shown in (232) and (233). The symbol ?>> stands for 'putatively presuppose'.

(232) Do/Don't place the vase on the table.

?>>The vase is not on the table.

(233) khun<sup>33</sup> su<sup>22</sup>nan chɔɔp<sup>42</sup>/may<sup>42</sup> chɔɔp<sup>42</sup> than<sup>33</sup> thu<sup>45</sup>rian<sup>33</sup>

HON Sunan like NEG like eat-Polite durian

'Sunan likes/does not like to eat durian.'

?>>Sunan is in a social status superior to the speaker.

The presumed presuppositions in both (232) and (233) are actually not regarded as the prerequisite features for the sentences to be uttered. In the imperative sentence in (232) that the vase is not on the table should not be regarded as a presupposition. It is in fact the felicity condition on the request that the vase be/not be placed on the table. Similarly, in (233) the presupposition that Sunan is socially superior to the speaker is only a conventional implicature which, following Levinson's (1983) criteria for conventional implicature, is derived not by the conversational maxims but through the lexical property of the honorific prefix *khun*. Moreover, even its falsehood does not have any effects on the truth value of the sentence.

Unlike entailments, presuppositions can be cancelled in some situations. First of all, they are cancelled when they do not conform to background assumptions or common knowledge. (234) and (235) exemplify such situations. The symbols  $\gg$  and  $\sim\gg$  stand for 'presuppose' and 'does not presuppose', respectively.

(234) Danai turned off the lights before he locked the door.  
 $\gg$  Danai locked the door.

(235) Danai fell asleep before he locked the door.  
 $\sim\gg$  Danai locked the door.

(234) presupposes that Danai did lock the door. This is in accordance with the temporal sequence, i.e. he turned off the lights and then locked the door. However, the same presupposition does not exist in (235). Danai's first action of falling asleep suggests that no activity was performed afterwards. According to real-world knowledge, normally people are not able to do anything whilst they are sleeping.

Presuppositions also vanish when inconsistent conversational implicatures appear, as exemplified in (236). The symbol  $\rightarrow$  stands for 'con conversationally implicates'.

(236) If the restaurant serves shark fin soup, Thida dislikes it.  
 $\rightarrow$  Perhaps the restaurant serves shark fin soup or perhaps it does not.  
 $\sim\gg$  The restaurant serves shark fin soup.

The factive predicate *dislike it* performed by Thida is likely to imply that the restaurant does serve shark fin soup. However, the conditional gives rise to a contradictory conversational implicature that the restaurant might or might not serve shark fin soup. As a result, the presupposition that the restaurant serves shark fin soup is cancelled.

Presuppositions are cancelled if they contrast the implication delivered by such discourse contexts as the one shown in (237):

(237) There is no snow in Thailand. Therefore, the snow in Thailand is not heavy.  
 $\sim\gg$  There is snow in Thailand.

Given that in the second sentence definiteness is added to the subject *snow*, the presupposition that there is snow in Thailand seems to arise. However, it is diminished by the background knowledge suggested in the first sentence, that in fact Thailand does not have snow.

A presupposition is cancelled in situations where it is used by the hearer as evidence to show the speaker that his assumption is wrong. One good example is obtained from the situation addressed by Chierchia and McConnell-Ginet (2000:385), which is restated in (238):

(238) A, noticing the open door: Was it you who opened the door to the porch? I closed it at lunchtime.

B: Well, it wasn't me who opened it, because I've been gone all afternoon, and it wasn't Joan who opened it, because she was with me, and it wasn't any of the kids who opened it, because they're on a field trip, and I strongly suspect that nobody opened it—there was a lot of wind this afternoon, you know.

The cleft question used by A presupposes that someone opened the door to the porch. In B's reply it is obvious that the presupposition persists in each of the sentences that she utters. Eventually, the presupposition is cancelled in the final sentence by the fact that that afternoon was windy and it was highly possible that the door was opened by the wind. Thus, the assumption or the presupposition that someone opened the door is nullified.

Apart from these situations, according to Levinson (1983), presuppositions can be cancelled in compound and complex sentences. Examples of such intra-sentential cancellation are provided in (239) and (240):

(239) Danai didn't struggle to reach the summit because, in fact, he gave up in the middle.  
~>> Danai reached the summit.

(240) If Danai spends too much money on the house, he will regret doing so.  
~>> Danai will spend too much money on the house.

The cancellation in these situations contributes to the projection problem, which will be fully discussed in the next section.

To summarise this section, presuppositions are cancellable. They can be nullified under three kinds of situations; namely, where they contrast the common knowledge, where there is a contradictory conversational implicature, and where the argument against the assumption exists. Moreover, their cancellability can be attributed to the effects of compound and complex sentences.

### 5.1.3 The projection problem

The projection problem is rooted in the cancellability of presuppositions in compound and complex sentences. In sentences of these types, the presupposition of a clause is supposed to become the presupposition of the whole sentence. In such cases, as shown in (241)-(244), the presuppositions incurred in the clauses successfully become the presuppositions of the whole sentences. In (241) the presupposition implied in the relative clause, i.e. someone broke the glass last night, prevails both in the affirmative and negative versions of the sentence. Likewise, in (242) the presupposition attained from the *that*-clause—there was a thief who that the antique—successfully projects over the whole sentence. In the compound sentence in (243), the presupposition that Danai wrote a romantic novel, which is triggered by the verb *to revise* in the preceding clause, ascends to become the presupposition of the sentence. The same presupposition embedded in the conditional as exhibited in (244) is not blocked and finally inherits in the sentence.

(241) It was/wasn't Danai who broke the glass last night.

>> Someone broke the glass last night.

(242) It's possible that the thief sold the antique he stole on the black market.

>> There was a thief who stole the antique.

(243) Either Danai revises his romantic novel, or he will turn to write a detective story.

>> Danai wrote a romantic novel.

(244) If Danai revised his romantic novel, the publisher would probably be happy to publish it.

>> Danai wrote a romantic novel.

However, in fact there are cases in which presuppositions are blocked due to the influence of the conjunctions which combine the two parts of the sentence. Two examples of this problem are given in (245) and (246):

(245) If Danai writes a romantic novel, then he will regret doing so.

~>> Danai will write a romantic novel.

(246) Either Danai writes a romantic novel, or he will regret doing so.

~>> Danai will write a romantic novel.

In both sentences above, the presupposition *Danai will write a romantic novel* lies in the second clause. It is triggered by the attitude verb *to regret*. Nonetheless, it vanishes when occurring as part of the conditional in (245) and the disjunction in (246). In compound and complex sentences, specific contexts are established with the influence of the conditional *if...then...* and the disjunct *either...or...*. These contexts, according to Karttunen (1973), *filter* the presuppositions when they ascend from the clauses where they are embedded.

Karttunen also points out that presuppositions can disappear due to the effect of verbs of saying and verbs of propositional attitude. These verbs are called *plugs*; they obstruct the presuppositions of the lower sentences and prevent them from projecting over the whole sentences.

The projection problem also concerns the puzzling persistence of presuppositions in cases like (247) where entailment does not survive. Consider the relations among (248), (249) and (250):

(247) The baker's poodle gave birth to five puppies.

(248) There is a baker and she owns a poodle.

(249) The baker's poodle gave birth to three puppies.

(250) The baker's poodle did not give birth to five puppies.

(247) presupposes (248) and entails (249). When the sentence is negated, as in (250), the negation still allows the presupposition to persist but blocks the entailment. The devices

that act in this manner which include negation, modal operators, and factive verbs, according to Karttunen, are called *holes*.

All of the cases discussed in this section reflect the projection problem of presuppositions. In the next section, analyses of properties of presuppositions and semantic and pragmatic accounts of presupposition will be addressed.

#### 5.1.4 Semantic presuppositions vs. pragmatic presuppositions

##### SEMANTIC PRESUPPOSITIONS

According to Levinson (1983), there are two approaches that show the attempt to define the properties of presuppositions in terms of semantics. These include the truth-conditional approach and the approach that is based on the composition of all the individual constituents in the sentence.

The first approach exhibits the use of logical models in determining the characteristics of presuppositions by presenting the logical relation between presuppositions, as defined by Frege and Strawson, and entailment. According to this approach, a sentence A entails another sentence B if and only if in all worlds where A is true, B is also true. This is shown in (251):

- (251) A sentence A semantically presupposes a sentence B iff:
- A entails B
  - ~A entails B

The above logical model for presuppositions corresponds to the idea of presuppositions proposed by Strawson, which has been discussed earlier. Taking the linguistic constituents of a sentence into account, it seems that the model suffices to explain how a presupposition emerges and how it should be defined. Nevertheless, like Strawson's account, the semantic account fails to cope with the case in which presupposition failure does not yield any effects regarding the truth conditions of a conditional sentence. One good example representing this problem is the use of the pronoun *tu* in French, which is provided by Keenan (1971:51). It is restated in (252) below:

- (252) Tu es Napoléon.



This sentence presupposes that the hearer is in a status inferior to the speaker or is in a close relation with her. Suppose this sentence is uttered to a person that has social status superior to the speaker; certainly the specific conditions for the presupposition implied in the pronoun *tu* are not met. However, it is not quite right to say that this sentence with the improper pronoun reference for the addressee should be prohibited from receiving the truth value. In fact, it shares the same truth conditions with the sentence where the correct pronoun *vous* is used—*the sentence is true if and only if the addressee is Napoléon; otherwise it is false*. The presuppositional politeness does not have any impact on the truth conditions of the sentence.

Moreover, the logical model in (251) cannot deal with the projection problem efficiently, especially the presuppositional cancellability in compound and complex sentences. Also, it fails to provide plausible explanations on the survival of a presupposition in the case in which entailment vanishes.

The second semantic approach created to deal with presuppositions can be linked to compositional semantics. Basing their idea on presuppositions in compound and complex sentences, Langendean and Savin (1971) proposed that a presupposition is compositional and the presupposition of a sentence is derived from the presuppositions of the individual clauses that constitute the sentence. However, as seen from the examples in the previous section, the presupposition projection in these compound and complex sentences does not follow the mechanism of compositional semantics. In many circumstances, the persistence of a presupposition is not confirmed merely by the presence of the presupposition trigger, as the presupposition triggered in the subordinate clause fails to pass through the matrix clause and thus is prevented from projecting over the whole sentence.

To conclude this section, viewing presuppositions as a semantic feature based on the concepts of truth conditions and compositionality does not suffice to provide an explanation of their nature which, seems not to be restricted to the realm of pure logic.

#### PRAGMATIC PRESUPPOSITIONS

Pragmatic theories of presuppositions have been created in order to account for their considerably unstable behaviour. These theories originated from two fundamental issues; namely, felicity or appropriateness and mutual knowledge or common ground. Presuppositions were defined in the early days of the theories as noted by Levinson (1983:205):

- (253) An utterance A pragmatically presupposes a proposition B iff A is appropriate only if B is mutually known by participants.

Following this definition, a sentence can be uttered only in the case where its presupposition is true. Conversely, uttering the sentence in the context where the presupposition is false is considered inappropriate. Also, it is necessary that the sentence be uttered in the context in which the existence of the presupposition is acknowledged by both the speaker and the addressee. The definition of a presupposition as shown in (253), nevertheless, does not apply to the cases in (254) and (255), where the presuppositions are not shared by the addressee.

- (254) I'm afraid I have to leave now. My hamster needs to see the vet.

>> The speaker has a hamster

- (255) I'm afraid I have to leave now. My elephant needs to see the vet.

>> The speaker has an elephant

If one supposes that (254) and (255) are uttered in the context in which the existence of the presupposition is not shared by the addressee, (254) is fine, while (255) seems to startle the addressee and would probably be considered inappropriate. The presuppositions in these two sentences relate to the common concept of pets. A hamster is ordinarily regarded as a pet. Thus, that the speaker owns a hamster is not unexpected and what (254) presupposes is still consistent with this expectation. On the other hand, elephants are normally regarded as wild animals so having an elephant as a pet is extremely unordinary. The definition in (255) which restricts the appropriateness of the utterance to the existence of the mutual knowledge is thus too rigid and does not provide grounds for why (254) is felicitous while (255) is odd.

Karttunen and Peters (1975, 1979) proposed a pragmatic theory to explain the nature of presuppositions. Their theory is based on the idea that presuppositions are part of the holistic meaning of a sentence conventionally generated through their linguistic components. It also follows the concept about meaning, which says that the external meaning of a sentence is derived from its individual constituents from the bottom up and that the semantic constituents are constructed simultaneously with the syntactic constituents. The theory presumes that a presupposition is generated in this fashion; it is

associated with the constituent of the sentence that acts as a presupposition trigger. The difference between an external meaning and a presupposition is that the former is integrated into the truth-condition of the sentence while the latter is not influenced by the truth-condition and does not have any impact on it.

Regarding the defeasibility and the projection problem of presuppositions, Karttunen and Peters' theory offers an argument which says that in fact presuppositions are non-cancellable. Also, the operations of *holes*, *plugs*, and *filters* as seen in the projection are part of the bottom-up constructions of meaning. They are carried out by *heritage expressions*, which have links to the inherited meanings of the constituents. Accordingly, the projection of a presupposition is supposed to be controlled by heritage expressions. Following this proposal, the *plug* in (256), for example, is attributed to the heritage expression lying in the verb *to claim*, which blocks the presupposition in (257) attained in the *that*-clause from ascending to project over the whole sentence.

(256) Danai claims that his antique porcelain bowl dates back to the Ming dynasty.

(257) Danai's antique porcelain bowl dates back to the Ming dynasty.

Even though Karttunen and Peters do not attempt to transform the parallel constructions of external meanings and presuppositions into logical forms, their theory is very similar to the semantic account of presuppositions. Like this account, it suffers from a downside, which lies in its incapability of capturing the defeasibility of presuppositions in the cases in which the references do not exist and cannot be traced.

Gazdar (1979a, 1979b) proposed another pragmatic theory to deal with the cancellability of presuppositions. Arguing against Karttunen and Peters' idea that presuppositions are non-cancellable, he proposed that presuppositions are in fact cancellable and that cancellability occurs when the sentence's presupposition is inconsistent with its entailment. This core idea of Gazdar's theory counters the ideas that the presupposition of a sentence is generated through its individual constituents and that the projection of the presupposition over the whole sentence is blocked by a particular constituent. He argues that when a conversation proceeds, the participants gradually add the propositions they express to the context. This augmentation of the conversation runs in a specific order. After an utterance is made, the entailment is added to the context first and then the conversation implicature and finally the presupposition are added. Following this

order, if the presupposition contrasts with the entailment, it will be overridden automatically. Gazdar's theory provides some plausible explanations of defeasibility in the cases in which the presuppositions generated in the lower clauses are prevented from ascending to become the actual presupposition of the whole sentence. An example is given in (258):

- (258) Danai successfully hid his slippers before his puppy could find and chew them.  
 ~>> Danai's puppy could find the slippers and chewed them

Applying Gazdar's theory to the case in (258), which displays a series of chronological events, the cancellability of the presupposition in the lower clause is not attributed to the lexical meaning of the temporal conjunction *before*. Instead, it is caused by the fact that the presupposition that the puppy could find the slippers and chewed them contradicts the entailment of the sentence, which suggests that the puppy could not find the slippers and thus did not chew them. The presupposition is therefore not taken into account in the first place.

Gazdar's theory also successfully clarifies the defeasibility in the conditional in (259), where the existence of the reference presupposed from the *if*-clause does not project over the whole sentence.

- (259) Danai was not disappointed that Nadal did not win the Wimbledon because in fact he won it.  
 ~>> Nadal did not win the Wimbledon

The first clause presupposes that Nadal did not win the Wimbledon. However, the entailment of the whole sentence, i.e. Nadal won the Wimbledon, is added to the context first and later blocks the presupposition that contradicts it.

All of the semantic and pragmatic accounts of presuppositions discussed so far treat them as part of the sentence. The semantic theories have many drawbacks concerning the inflexibility of the truth-conditions and the logical models in real contexts. The most problematic issue concerns their incapability of tackling the defeasibility and projection problem in compound and complex sentences. The pragmatic theories, in contrast, have more advantages in dealing with these problems. Karttunen and Peters' theory still links to the semantic theories, while Gazdar's theory suggests entailments as the key to the

cancellability and solution of the projection problem. Without constraints regarding truth-conditions, they are flexible yet systematic enough to provide explanations concerning how presuppositional felicity is determined.

So far, presuppositions have been discussed both in terms of their general characteristics and the accounts of their projection. These are quite useful for the analyses of the implications of *lɛɛw45* and for the establishment of a reliable account of its operation. The remainder of this chapter is dedicated to defining the implications of *lɛɛw45* and the appraisal of its presuppositional properties.

## 5.2 DEFINING *Lɛɛw45*'S IMPLICATIONS

Before inspecting the presuppositional properties of the implications of *lɛɛw45*, the semantics of *lɛɛw45*'s implications should be defined. In order to recall *lɛɛw45*'s implications and how the sentence marked with *lɛɛw45* differs from its unmarked counterpart, a minimal pair of discourses is provided in (260) and (261):

(260) Context: Danai told Sunan that he had a plan for a trip to Phuket, a city in the south of Thailand, and would spend the first weekend of March there. However, he later got an assignment from his boss to take care of their customers on the weekend he was supposed to enjoy his getaway. Therefore, he had to postpone his trip. While having lunch with the customers at a restaurant in Bangkok, Danai met Sunan, who was very surprised to see him.

Sunan: may42daay42 pay33 phuu33ket22 rəə24  
 neg go Phuket yes/no QW  
 'Didn't you go to Phuket?'

Danai: luan42 dən33thaaŋ33 lɛɛw45  
 postpone trip PART  
 'I postponed my trip (previously, as I had told you, I had planned to travel to Phuket and expected to stay there during the first weekend of March).'  
 \*luan42 dən33thaaŋ33  
 postpone trip  
 'I postponed my trip.'

(261) Context: Danai planned a trip to Phuket, a city in the south of Thailand, and would spend the first weekend of March there. However, he later got an assignment from his boss to take care of their customers on the weekend he was supposed to enjoy his getaway. Therefore, he had to postpone his trip. Sunan did not know anything about this. One day she saw Danai. She waved at him and came to him for a short conversation. Sunan could see from Danai's facial expression that he was bored.

Sunan: tham33may33 tham33 na42 bua22

why make face be bored

'Why do you look bored?'

Danai: phrɔ45 luan42 dən33thaan33 pay33 phuu33ket22

because postpone trip go Phuket

'Because I postponed my trip to Phuket.'

\*phrɔ45 luan42 dən33thaan33 pay33 phuu33ket22 læw45

because postpone trip go Phuket PART

'Because I postponed my trip to Phuket (previously, as I had told you, I had planned to travel to Phuket and expected to stay there during the first weekend of March).'

(260) and (261) indicate that in general both the utterance marked with *læw45* and its unmarked counterpart offer the same assertion but are made under different contexts. The difference in terms of context results in two different sentence constructions. Both utterances made by Danai in (260) and (261) assert the cancellation of his trip to Phuket. His utterance in (260) is made under the context in which his plan for a trip to Phuket on the first weekend of March was introduced to the common ground and a mutual expectation that the trip would take place as planned was established prior to the reference time. On the other hand, in (261) the same assertion is made under the context in which no expectation concerning the trip ever existed.

The expectation regarding the issue under discussion induces the definite existence of the NP representing the issue under discussion. In order for an expectation regarding the state of affairs of the issue under discussion to be made, the NP/issue under discussion must be introduced earlier in the discourse, while the expectation regarding its state of affairs is later made and added to the common ground. Thus, in a situation where *læw45* is

used, the definite NP/issue under discussion is mapped to the expectation relevant to it. In this way, the existence of the definite NP/issue under discussion can be traced through the expectation, which requires the NP that is introduced before the conversation take place and be expected to be in a specific state of affairs. In the case of the unmarked version of the utterance, the absence of the expectation allows a free interpretation of the NP; it is possibly interpreted either as a definite or an indefinite NP, depending upon background knowledge and context. In (261), the trip mentioned in Danai's utterance can be interpreted either as a definite NP, which was introduced before the reference time or, in this case, before the utterance is made, or an indefinite NP, which is simultaneously introduced when Danai makes his utterance. Due to the relation between the expectation and the definite existence of the NP, *lɛɛw45*, as shown in (262), is not acceptable in the situation where the issue under discussion is represented by an indefinite NP. The indefinite status of the NP *kra22paw24* 'bag' suggests that it has never been introduced to the common ground and that the expectation regarding its state of affair does not exist. Therefore, the presence of *lɛɛw45* is unacceptable.

- (262) \**kra22paw24 bay33 nɯŋ22 thuuk22 kha22mooy33 pay33 lɛɛw45*  
 bag CLASS one PASSIVE steal go PART  
 Intended: 'A bag has been stolen.'

Besides the indefinite status of the NP, in some cases, the zero-marked alternative offers a generic reading, not a past reading. As a result, it does not give rise to a presupposition, which is normally formed by the knowledge concerning the NP already existing in the common ground. The sentence in (263) is a good example:

- (263) *khaw24 pay33 rooŋ33rian33*  
 he go school  
 'He goes to school (it is his habit)' / 'He went to school.'

It is possible that (263) is uttered in a context in which the interlocutors discuss the daily activities of the person under discussion and the speaker wants to inform the hearer that going to school is one of them. The generic reading derived from this utterance can thus be considered a fact about a person and does not presuppose the previous expectation about the subject.

Reconsidering the situations in (260) and (261), the presence and absence of *lεw45* correspond to the availability of both the expectation and the definite existence of the NP—*the trip to Phuket*—which also serves as the issue under discussion. In (260), the existence of the expectation and the definite status of the NP urge Danai to inform Sunan about the cancellation of his trip by making an utterance that conveys an assertion which depicts the current state of affairs of the issue under discussion while at the same time induce the expectation concerning it and signalling a contrast between the assertion and the expectation. As a result, *lεw45* is added so that such a message can be delivered. (260) implies that the expectation that the trip to Chiangmai would take place is no longer valid and is countered by the assertion that the trip has actually been cancelled. In contrast, in the situation in (261) no expectation regarding the state of affairs of the trip exists. Danai is not required to point out a counter-expectation and the addition of *lεw45* to the utterance is thus unnecessary. Moreover, as his plan for a trip to Chiangmai has never been added to the common ground, Danai has to clearly mention it in his utterance. In this case, an accommodation is possibly needed if Sunan wonders about the existence of Danai's plan for the trip.

The minimal pair of the situations in (260) and (261) gives rise to two (not-at-issue) implications as follows: 1) *lεw45(p)* presupposes the definiteness of the subject and a previous expectation *q* and 2) it conventionally implicates that the asserted proposition *p* contrasts with *q*. These implications subsequently determine the conditions of the use of *lεw45*.

However, before forming an account of *lεw45*'s operation, it is crucial to check if its implications should be regarded as presuppositions, which are supposed to survive in all forms of sentences and in embedded positions, or as projective meaning, which does not consistently behave like a presupposition in a traditional sense.

### 5.3 THE APPRAISAL OF THE IMPLICATIONS OF *Lεw45*

In order to appraise the status of *lεw45*'s implied meaning, three sets of tests, including Geurts' (1999) Presupposition Test Battery, Levinson's (1983) tests using family of sentences, and the tests developed by Tonhousaer et al. (2013) are implemented.



### 5.3.1 Geurts' Presupposition Test Battery

The Presupposition Test Battery created by Geurts (1999) has been applied in order to verify *lɛɛw45*'s (non-) projection from *plugs*. In all of the test sentences *lɛɛw45(p)* is embedded. The test begins with the declarative in (264):

(264) Context: Sunan has five horses and she raises them at her country house. Last week one of them fell sick and refused to eat anything. Thinking that the horse would be in a condition of poor health condition for several days, Sunan was very worried. However, when she was in its stable one morning she found that the horse was eating dried grass in the feed bucket. She was delighted.

su22nan33 dii33cay33 thii42 maa45 puay22 kin33 ?aa33haan24 lɛɛw45  
 Sunan happy COM horse sick eat food PART

'Sunan is happy that the sick horse has started eating its food.'

**Assertion**: The sick horse has started eating its food and Sunan is happy that it has.

**Presupposition**: 1) There was a definite horse which was sick.

2) It was expected not to eat its food.

Presuming that the reference time is NOW, the sentence in (264) implies that before the event *eat food (the sick horse)* took place, the expectation *q*, that the sick horse would not eat its food, existed. In order to check if it is a presupposition, this expectation regarding the state of affairs of the sick horse will be placed in the embedded positions of sentences of various constructions, as shown from (265) to (268):

(265) may42 pen33 khwaam33ciŋ33 thii42 su22nan33 dii33cay33 thii42  
 NEG COP truth COM Sunan happy COM  
 maa45 puay22 kin33 ?aa33haan24 lɛɛw45  
 horse sick eat food PART

'It's not true that Sunan is happy that the sick horse has started eating its food.'

**Assertion**: It is not the case that the sick horse has started eating its food and Sunan is happy that it has.

**Purported presupposition**: 1) There was a definite horse which was sick.

2) It was expected not to eat its food.

**What projects:** 1) There was a definite horse which was sick.  
2) It was expected not to eat its food.

(266) pen33pay33day42 waa42 su22nan33 dii33cay33 thii42 maa45 puay22  
possible COM Sunan happy COM horse sick  
kin33 ꞑaa33haan24 læw45  
eat food PART

'It's possible that Sunan is happy that the sick horse has started eating its food.'

**Assertion:** It might be the case that the sick horse has started eating its food and Sunan is happy that it has.

**Purported presupposition:** 1) There was a definite horse which was sick.  
2) It was expected not to eat its food.

**What projects:** 1) There was a definite horse which was sick.  
2) It was expected not to eat its food.

(267) phoo42 ruu42 waa42 su22nan33 dii33cay33 thii42 maa45 puay22  
dad know COM Sunan happy COM horse sick  
kin33 ꞑaa33haan24 læw45  
eat food PART

'Dad knows that Sunan is happy that the sick horse has started eating its food.'

**Assertion:** That the sick horse has started eating its food makes Sunan happy and dad knows this.

**Purported presupposition:** 1) There was a definite horse which was sick.  
2) It was expected not to eat its food.

**What projects:** 1) There was a definite horse which was sick  
2) It was expected not to eat its food.

(268) thaa42 su22nan33 dii33cay33 thii42 maa45 puay22 kin33 ꞑaa33haan24  
if Sunan happy COM horse sick eat food  
læw45 chan24 ca22 phaa33 thəə33 pay33 cha22lɔŋ24  
PART I FUT take her go celebrate

'If Sunan is happy that the sick horse has started eating its food, I'll take her out to celebrate it.'

**Assertion:** If Sunan is happy that the sick horse has started eating its food, then I'll take her out to celebrate it.

**Purported presupposition:** 1) There was a definite horse which was sick.  
2) It was expected not to eat its food.

**What projects:** 1) There was a definite horse which was sick  
2) It was expected not to eat its food.

*Lɛw45*'s implied meaning, that is, the expectation that *q* or, in the case of (264), that the sick horse would not eat for several days, can escape the embedded positions in the above sentences. In order to thoroughly check whether the implied meaning is a presupposition, the tests in the second stage of the Presupposition Test Battery were applied, as shown in (269) and (270):

(269) thaa42 su22nan33 khaat42 waa42 maa45 puay22 ca22 may42 kin33  
if Sunan expect COM horse sick FUT NEG eat  
ʔaa33haan24 thəə33 tɔŋ42 dii33cay33 thii42 man22 kin33 ʔaa33haan24  
food she must be happy COM it eat food  
lɛw45

PART

'If Sunan expected that the sick horse would not eat anything, she must be happy that it has started eating its food.'

**Assertion:** It might be the case that Sunan expected that the sick horse would not eat anything and if she did she must be happy that it has started eating its food.

**Purported presupposition:** 1) There was a definite horse which was sick.  
2) It was expected not to eat its food.

**What projects:** There was a definite horse which was sick.

(270) pen33pay33day42 waa42 su22nan33 chaa42 waa42 maa45 puay22 ca22  
 possible COM Sunan believe COM horse sick fut  
 may42 kin33 ?aa33haan24 lɛɛ42 dii33cay33 thii42 man22 kin33  
 NEG eat food and be happy COM it eat  
 ?aa33haan24 lɛɛw45  
 food PART

'It's possible that Sunan expected that the sick horse would not eat anything and she is happy that it has started eating its food.'

**Assertion:** It might be the case that Sunan expected that the sick horse would not eat anything and she is happy that it has started eating its food.

**Purported presupposition:** 1) There was a definite horse which was sick.  
 2) It was expected not to eat its food.

**What projects:** There was a definite horse which was sick.

The two sentences in (269) and (270) do not imply that the state of affairs of the sick horse before the reference time represented in the expectation is true. These phenomena correspond to Geurts' suggestion, that once a presupposition is embedded in the first subordinate clause of a sentence carrying epistemicity, it will be under the scope of the epistemic clause which blocks it from projecting.

### 5.3.2 Levinson's presupposition tests

According to the core concept of Levinson's (1983) tests, a presupposition, which comprises background information, must survive in all sentences in the family. Nevertheless, this does not apply to the interrogative or negative variants in which the expectation regarding the state of affairs of the issue under discussion before the reference time is not present either in the interrogative variant or the negative variant, in which *lɛɛw45* is under the scope of the VP and the expectation implication does not project.

Suppose Sunan knows that Danai has a mango tree which has never borne fruit. One day she met Danai and was told that he got some fruit from the tree. The base sentence is shown in (271):

(271) ton42 ma45muang42 ?ɔk22luuk42 lɛw45  
 tree mango bear fruit PART

'The mango tree has borne fruit.'

**Assertion:** The mango tree has borne fruit.

**Presupposition:** 1) There was a definite mango tree.

2) It was expected not to bear fruit.

(271) can be transformed to an interrogative via the addition of the yes/no question particle *rɔ45yan33*, as shown in (272). This question particle is very interesting in that, first of all, it sets a temporal unit which covers the time prior and up to the utterance/reference time. In addition, it signifies that something is expected to happen at some point of time in this temporal unit. With the effect from this question particle, the sentence presupposes that Danai's mango tree is expected to bear fruit at some point in time before and up to the utterance time. Thus, intriguingly, what the question presupposes is the opposite version of the presupposition '*the mango tree was expected not to bear fruit*' obtained from the affirmative base sentence. It in fact implies that before the reference time the mango tree was expected to bear fruit. The question is asked in order to check if the expectation has already been realised.

(272) ton42 ma45muang42 ?ɔk22luuk42 (lɛw45) rɔ45yan33  
 tree mango bear fruit PART PART

'Has the mango tree borne fruit yet (as previously expected)?'

**Assertion:** Is it the case that the mango tree has already borne fruit?

**Purported presupposition:** 1) There was a definite mango tree.

2) It was expected not to bear fruit.

**What projects:** 1) There was a definite mango tree.

2) It was expected to bear fruit.

The unmarked alternative can be converted to an interrogative, as demonstrated in (273) with the addition of another yes/no question particle *may45*, which suggests that the temporal unit referred in the question covers only the time before the utterance time and excludes the time that overlaps with the utterance time. Thus, the question is supposed to refer only to one point in the past at which the event took place. It is asked in order to check if the event happened or not and, unlike the yes/no question in (272), it does not

refer to any expectation concerning the issue under discussion. Therefore, a reply marked with *lɛɛw45* is infelicitous. Interestingly, the presence of *lɛɛw45* in this unmarked alternative is ungrammatical.

(273) ton42 ma45muang42 ʔɔk22luuk42 may45  
tree mango bear fruit PART

'Did the mango tree bear fruit?'

**Assertion:** Is it the case that the mango tree bore fruit?

**Presupposition:** There was a definite mango tree.

Similar to the interrogative variant, as shown in (274), the expectation is not implicated in the negative variant, where *lɛɛw45* appears in the VP-level negation. Like (272), it implies that the mango tree was expected to bear fruit.

(274) ton42 ma45muang42 may42 ʔɔk22luuk42 lɛɛw45  
tree mango NEG bear fruit PART

'The mango tree has no longer borne fruit.'

**Assertion:** The mango tree used to bear fruit but now it no longer does it.

**Purported presupposition:** 1) There was a definite mango tree.

2) It was expected not to bear fruit.

**What projects:** 1) There was a definite mango tree.

2) It was expected to bear fruit.

(275) ton42 ma45muang42 may42 ʔɔk22luuk42  
tree mango NEG bear fruit

'The mango tree did not bear fruit.'

**Assertion:** It is not the case that the mango tree bore fruit.

**Presupposition:** There was a definite mango tree.

Like its marked counterpart in (274), the unmarked alternative in (275) implies the existence of a specific mango tree and denotes the completion of the event *bear(the mango tree, fruit)*. However, it does not imply the previous expectation concerning the tree.

The fact that the expectation implication does not project because *lɛɛw45* appears under the scope of negation and interrogation shows that the two sentence variants

do not constitute relevant test sentences. They thus in fact confirm that the presupposed expectation actually projects.

Apart from the disappearance of *leew45*'s implications in negations and questions, the issue concerning context and the use of *leew45* needs to be examined. As suggested earlier in this chapter, the use of *leew45* appears to be context-sensitive; it is used only in the contexts that contain both a definite NP that represents the issue under discussion and the expectation established based on the state of affairs of the issue under discussion prior to the reference time. Such context-sensitivity of *leew45* also requires verification. If *leew45* is really context-sensitive, then we need to further examine if it is really the case that *leew45* never appears or is infelicitous in the context that does not satisfy its conditions of use. If *leew45*'s implications in fact do not obligatorily need the local context that entails them, then we can conclude that they behave in a way that violates the conventional idea that presuppositions must be satisfied by their local context (Karttunen 1974; Stalnaker 1974).

### 5.3.3 Tonhauser et al.'s projection tests

Tonhauser et al. (2013) proposed another approach, aimed at capturing the characteristics of the implications beyond those drawn from the family of sentence diagnostic. The approach adopts Langendoen and Savin's (1971) notion of projection, which refers to the implications which persist despite the presence of various operators that tend to block them. It checks if the projective contents are sensitive to a Strong Contextual Felicity constraint or if they are bound to Obligatory Local Effect. A Strong Contextual Felicity constraint refers to a condition which requires that a trigger be used only in the contexts that entail its implications, while an Obligatory Local Effect refers to the persistence of the projective contents when the trigger interacts with an operator. Making use of the Strong Contextual Felicity constraint and the Obligatory Local Effect, projective contents are categorised into subclasses. However, this categorisation will not be discussed in the current study. Only the application of the approach to the verification of the implications of *leew45* will be addressed here.

The Strong Contextual Felicity constraint, which checks if a particular projective content is context-sensitive, is created in accordance with the traditional concept of a presupposition, which says that a presupposition only appears in the context that entails it. Under Tonhauser et al.'s approach, contexts are formed with the information mutually

accepted by the participants of a conversation. This information is collected from various sources; namely, the situation and linguistic context where a particular utterance is made and the previous discourse. Contexts, under this approach, are classified into *m*-positive contexts and *m*-neutral contexts. *M*-positive contexts refer to the contexts that entail or imply the projective content *m*, while *m*-neutral contexts refer to the contexts that imply neither *m* nor  $\sim m$ . The core concept of Strong Contextual Felicity constraint and the diagnostic for Strong Contextual Felicity as proposed by Tonhauser et al. (2013:16) are presented in (276) and (277), respectively:

(276) If the utterance of trigger *t* of projective content *m* is acceptable only in an *m*-positive context, then *t* imposes a Strong Contextual Felicity constraint with respect to *m*.

(277) Let *S* be an atomic sentence that contains trigger *t* of projective content *m*.

- I. If uttering *S* is acceptable in an *m*-neutral context, trigger does not impose a Strong Contextual Felicity constraint with respect to *m*.
- II. If uttering *S* is unacceptable in an *m*-neutral context and acceptable in a minimally different *m*-positive context, the trigger imposes a Strong Contextual Felicity constraint with respect to *m*.

As mentioned earlier, the examples provided so far in this chapter are likely to suggest that *leew45* is context-sensitive. This assumption can be verified by applying the Strong Contextual Felicity constraint. In the case of *leew45*, an *m*-positive context refers to a context that entails both the definite existence of the NP/issue under discussion and the expectation regarding the state of affairs of the issue under discussion established before the reference time. Suppose that there is a situation where the interlocutors are having a conversation about a vase; (278) represents an *m*-positive context of this situation.

(278) Two weeks ago Danai and Sunan went to a department store. Danai bought Sunan a vase, which was beautiful and in perfect condition. Today Sunan invited Danai to join her for lunch at her house. While they were enjoying the meal they heard a breaking noise from the living room. Sunan rushed to the room and found that her cat had broken the vase.



Implications:

- There is a specific vase that both Danai and Sunan know.
- Both Danai and Sunan knew that the vase was in perfect condition and expected that it would not break.

The *m*-neutral context of the same situation is thus the context that lacks both or one of the two implications, as shown in (279). In (279i) the existence of a definite vase and the expectation that the vase would not break, which was established based on its excellent condition, were recognised only by Sunan, while in (279ii) Danai recognises the existence of the vase but does not have any expectation about it.

- (279) (i) Two weeks ago Sunan went to a department store. She bought a vase, which was beautiful and in perfect condition. Danai did not know this. Today Sunan invited Danai to join her for lunch at her house. While they were enjoying the meal they heard a breaking noise from the living room. Sunan rushed to the room and found that her cat broke the vase.
- (ii) Two weeks ago Sunan went to a department store. She bought a vase, which was beautiful and in perfect condition. A week later Danai visited Sunan at her house for the first time and saw the vase among other items in her living room. As they never talked about the vase, Sunan did not know that Danai acknowledged that she had it. Today Sunan invited Danai to join her for lunch at her house. While they were enjoying the meal they heard a breaking noise from the living room. Sunan rushed to the room and found that her cat broke the vase.

Suppose Sunan wants to update the state of affairs of the vase; the use of *lɛɛw45*, as shown in (280) below, is felicitous in the *m*-positive context in (278) but not in the *m*-neutral context in (279).

- (280) cɛɛ33kan33 tɛɛk22 lɛɛw45  
 vase break part  
 'The vase broke/is broken.'

On the other hand, in the *m*-neutral context, the unmarked alternative, as shown in (281), not the alternative marked with *lεw45*, is felicitous.

- (281) cε33kan33 tεk22  
 vase break  
 'A/The vase broke/is broken.'

The felicity of *lεw45* in the *m*-positive context in (278) and its infelicity in the *m*-neutral context in (279) suggest that the particle imposes a Strong Contextual Felicity constraint and that its implications are projective.

Apart from tests for Strong Contextual Felicity constraint, Tonhauser et al. also proposed projection tests which, similar to Guerts' Presupposition Test Battery and Levinson's tests for presupposition, involve the family of sentence variants: negative, interrogative, epistemic modal, and conditional variants. The property of projection as defined by Tonhauser et al., which is given in (282), requires that a projective content derived from a particular sentence persist in all variants of the sentence.

- (282) A content *m* of expression *t* is projective (i.e. has the property of Projection) if and only if *m* is typically implied by utterances of atomic sentences *S* containing *t* and may also be implied by utterances of Family of Sentence variants of *S*. (2013:25)

The family of sentences diagnostic for projections is presented in (283):

- (283) Let *S* be an atomic sentence which gives rise to implication *m* and *FOS(S)* be the Family of Sentences variants of *S*.
- I. Trigger *t* imposes a Strong Contextual Felicity constraint with respect to *m*: If utterances of *FOS(S)* are judged unacceptable in an *m*-neutral context and acceptable in an *m*-positive context, the implication *m* is projective.
  - II. Trigger *t* does not impose a Strong Contextual Felicity constraint with respect to *m*: If implication *m* is implied by the utterances of *FOS(S)* in an *m*-neutral context, then *m* is projective.

III. Trigger *t* does not impose a Strong Contextual Felicity constraint with respect to *m*, but with respect to some other implication *n*: If the implication *m* is implied by the utterances of *FOS(S)* in an *m*-neutral and *n*-positive context, then *m* is projective.

As *lɛɛw45* has been proved to impose a Strong Contextual Felicity constraint, only the subdiagnostic I was applied in this study. The projection test was run in the *m*-positive and *m*-neutral contexts used in the test for Strong Contextual Felicity constraint. The sentence variants for the *m*-positive context in (278) were constructed as shown in (284)-(287):

(284) cɛɛ33kan33 tɛɛk22 lɛɛw45

vase break PART

'The vase broke/is broken.'

**Assertion:** The vase broke/is broken.

**Purported presupposition:** 1) There was a definite vase.

2) It was expected not to break/be broken.

**What projects:** 1) There was a definite vase.

2) It was expected not to break/be broken.

(285) may42 pen33 khwaam33ciŋ33 thii42 cɛɛ33kan33 tɛɛk22 lɛɛw45

NEG COP truth COMP vase break PART

'It's not true that the vase broke/is broken.'

**Assertion:** It is not the case that the vase broke/is broken.

**Purported presupposition:** 1) There was a definite vase.

2) It was expected not to break/be broken.

**What projects:** 1) There was a definite vase.

2) It was expected not to break/be broken.

(286) pen33pay33day42 waa42 cɛɛ33kan33 tɛɛk22 lɛɛw45

possible COMP vase break PART

'It's possible that the vase broke/is broken.'

**Assertion:** The vase broke/is broken.

**Purported presupposition:** 1) There was a definite vase.

2) It was expected not to break/be broken.

**What projects:** 1) There was a definite vase.

2) It was expected not to break/be broken.

(287) thaa42 cεε33kan33 tεεk22 lεεw45 la22kɔɔ42 su22nan33 tɔɔŋ42  
 if vase break PART then Sunan must  
 sia42jay33 maak42 nεε42  
 be sad a lot surely

'If the vase broke/is broken, Sunan must be very sad.'

**Assertion:** It is not the case that the vase broke/is broken.

**Purported presupposition:** 1) There was a definite vase.

2) It was expected not to break/be broken.

**What projects:** 1) There was a definite vase.

2) It was expected not to break/be broken.

The family of sentences with an addition of *lεεw45* in the *m*-neutral context in (279) are given in (288)-(291):

(288) #cεε33kan33 tεεk22 lεεw45  
 vase break PART  
 #'A/The vase broke/is broken.'

(289) #may42 pen33 khwaam33ciŋ33 thii42 cεε33kan33 tεεk22 lεεw45  
 NEG COP truth COMP vase break PART  
 #'It's not true that the vase broke/is broken.'

(290) #pen33pay33day42 waa42 cεε33kan33 tεεk22 lεεw45  
 possible COMP vase break PART  
 #'It's possible that the vase broke/is broken.'

(291) #thaa42 cεε33kan33 tεεk22 lεεw45 la22kɔɔ42 su22nan33 tɔɔŋ42  
 if vase break PART then Sunan must  
 sia42jay33 maak42 nεε42  
 be sad a lot surely  
 #'If the vase broke/is broken, you (Danai) must be very sad.'

In the *m*-positive context the appearance of *lɛɛw45* is acceptable in all of the sentence variants where its implications persist. However, the particle is unacceptable in the *m*-neutral context in which Danai does not share the knowledge about the existence of a definite vase and the expectation concerning its state of affairs. Even though the test results above suggest that *lɛɛw45*'s implications are projective, a note should be made regarding its presence in the negative variant. As in Levinson's presupposition tests, there is an issue concerning the scope of negation when *lɛɛw45* is present in an *m*-positive context. The purported expectation does not project in a negative sentence where negation scopes at the VP level. The sentence in (292) below implies the previous expectation that the vase would break. Like (271) and (274), it is not a relevant test sentence and thus that the presupposed expectation projects is confirmed.

(292) cɛɛ33kan33 may42 tɛɛk22 lɛɛw45  
vase neg break PART

'A/The vase did not break/is not broken.'

**Assertion:** It is not the case that the vase broke/is broken.

**Purported presupposition:** 1) There was a definite vase.

2) It was expected to break/be broken.

**What projects:** 1) There was a definite vase.

2) It was expected to break/be broken.

So far, Tonhauser et al.'s tests have proved that *lɛɛw45* induces a Strong Contextual Felicity constraint and that its implications are projective. Still, its non-presuppositional behaviour when it co-occurs with negation has been observed.

Regarding Obligatory Local Effect, it checks how implication triggers interact with operators. The presence of Obligatory Local Effect is represented through the sustainability of the projective meaning when the trigger is embedded and is under the scope of the verbs of attitude, such as *think* and *believe*. According to the clarified definition of Obligatory Local Effect according to Tonhauser et al., as given in (293), a projective content contains the Obligatory Effect under the conditions that the trigger is located in the complement part of a *belief*-predicate and that the content itself is part of this predicate. Considering a sentence in which the trigger imposes a Strong Contextual Felicity Constraint, the diagnostic, as given in (294), states that if the projective content is ignored then the sentence does not have Obligatory Local Effect. Similarly, a sentence which does not

impose a Strong Contextual Felicity constraint, is not bound to Obligatory Local Effect.

(293) A projective content  $m$  with trigger  $t$  has Obligatory Local Effect if and only if, when  $t$  is syntactically embedded in the complement of a *belief*-predicate  $B$ ,  $m$  necessarily is part of the content that is targeted by, and within the scope of  $B$ .  
(2013:41)

(294) Let  $S_1$  be an atomic sentence with trigger  $t$  of content  $m$ .

I. Trigger  $t$  imposes a Strong Contextual Felicity constraint with respect to  $m$ : Let  $S$  be a sentence where  $S_1$  is embedded under a *belief*-predicate. If the utterance of  $S$  is acceptable when the utterance context entails  $m$  but the bearer of the attitude is explicitly ignorant of  $m$ , then the content  $m$  with trigger  $t$  need not have its effect locally, i.e. does not have Obligatory Local Effect.

II. Trigger  $t$  does not impose a Strong Contextual Felicity constraint: Three possible implementations:

1. Let  $S_2$  be an atomic sentence that implies  $\sim m$ , and  $S$  a sentence where both  $S_1$  and  $S_2$  are conjoined under the same *belief*-predicate. If the utterance of  $S$  is acceptable, then the content  $m$  with trigger  $t$  need not have its effect locally, i.e. does not have Obligatory Local Effect.

2. Let  $S_2$  be an atomic sentence that implies  $\sim m$ . Embed  $S_1$  under a *belief*-predicate with attitude holder  $A$  to form the complex sentence  $S'_1$  and embed  $S_2$  under the same *belief*-predicate with the same attitude holder  $A$  to form the complex sentence  $S'_2$ . Let  $S$  be a conjunction of  $S'_1$  and  $S'_2$ . If the utterance of  $S$  is acceptable, then the content  $m$  with trigger  $t$  need not have its effect locally, i.e. does not have Obligatory Local Effect.

3. Let  $S_2$  be an atomic sentence that contains both trigger  $t$  of content  $m$  and also implies  $\sim m$ . Let  $S$  be a sentence where  $S_2$  is embedded under a *belief*-predicate. If the utterance of  $S$  is acceptable, then the content  $m$  with trigger  $t$  need not have its effect locally, i.e. does not have Obligatory Local Effect.

III. Trigger  $t$  does not impose a Strong Contextual Felicity constraint with respect to  $m$ , but with respect to another implication  $n$ : This subdiagnostic has the same three possible implementations as subdiagnostic II, with the addition that the context in which  $S$  is uttered entails that the speaker and the bearer of the attitude know  $n$ . (2013:42)

As *lɛɛw45* imposes a Strong Contextual Felicity constraint, as shown in the previous tests, this study will adopt only subdiagnostic I. In (295) below, the utterance indicates that the implications of *lɛɛw45* are not available in the common ground; the speaker does not have any background knowledge about them. The presence of *lɛɛw45* in this sentence is unacceptable. This is partial evidence that the particle is bound to Obligatory Local effect.

(295) Context: Danai normally practices meditation at a local temple on Saturdays. Sunan knows this. However, for this Saturday Danai was planning to visit Thani. Then, as Thani had an urgent business trip he had to change his plan and practice meditation at the temple. Sunan does not know of his plan or of the change of his plan.

#su22nan33 khit42 waa42 da33nay33 pay33 naŋ42sa22maa33thi45  
 Sunan think COMP Danai go meditation  
 thii42 wat45 lɛɛw45  
 at temple PART  
 #‘Sunan thinks that Danai has gone practicing meditation at the temple.’

In order to check if *lɛɛw45* can really be used in this embedded context, another test was carried out, as shown in (296):

(296) Context: Danai normally practices meditation at a local temple on Saturdays. Sunan knows this. However, for this Saturday Danai was planning to visit Thani. Then, as Thani had an urgent business trip he had to change his plan and practice meditation at the temple. Sunan knows of his plan as well as the change of plan.

#su22nan33 khit42 waa42 da33nay33 pay33 naŋ42sa22maa33thi45  
 Sunan think COMP Danai go meditation  
 thii42 wat45 lɛɛw45  
 at temple PART  
 #‘Sunan thinks that Danai has gone practicing meditation at the temple.’

The context in this test entails the expectation implication and that the bearer of the attitude is aware of it demonstrates that the presence of *lɛɛw45* is also unacceptable. The results from the two tests above show that *lɛɛw45* cannot be embedded in this way. They do not

provide any evidence that proves *lɛɛw45*'s sensitivity to Obligatory Local Effect.

However, in another context in which the expectation implication is mistakenly assumed by the bearer of the attitude, the presence of *lɛɛw45* in the embedded position is acceptable. This is shown in (297):

(297) Context: Danai normally practices meditation at a local temple on Saturdays. Sunan mistakenly thinks that Danai was planning to visit Thani but changed his plan. Danai, nonetheless, never had such plans.

su22nan33 khit42 waa42 da33nay33 pay33 nan42sa22maa33thi45  
 Sunan think COMP Danai go meditation  
 thii42 wat45 lɛɛw45  
 at temple PART

‘Sunan thinks that Danai has gone practicing meditation at the temple.’

**Assertion**: Sunan thinks that Danai has gone practicing meditation at the temple.

**Purported presupposition**: 1) There was a definite man named Danai.

2) He was expected not to go practicing meditation at the temple.

**What projects**: 1) There was a definite man.

2) He was expected not to go practicing meditation at the temple.

The acceptability of *lɛɛw45* in (297) corresponds to Tonhauser et al.'s claim that it is not always the case that the test using *belief*-predicates indicates that the implication triggers imposing Strong Contextual Felicity constraint are bound to Obligatory Local Effect. Obvious evidence is seen in the case of the English additive *also*. An example is given by Heim (1992:209) as shown in (298):

(298) Context: Two kids are talking to each other on the phone.

John: I<sub>I</sub> am already in bed.

Mary: My parents think I<sub>F</sub> am **also**<sub>I</sub> in bed.

In the situation above, the context does not explicitly entail the projective content formed by *also*. Moreover, it is not clear whether the accumulation of the background knowledge *John is in bed*, which is triggered by *also* in this specific context, has taken



place in Mary's parents' minds. However, the use of *also* in Mary's utterance is acceptable. This phenomenon raises the issue as to which part of the projective content is attached to the local effect.

The irregular acceptability in the context that does not clearly entail the projective contents also applies to the case of *lɛɛw45*. (299), similar to (297), indicates *lɛɛw45*'s non-restricted binding to Obligatory Local Effect.

(299) Context: Yesterday the temperature in Bangkok was 32 degrees centigrade. Sunan did not know this because she was on a flight from Berlin to Bangkok. Today Bangkok's temperature increased to 35 degrees centigrade.

su22nan33 khit45 waa42 kruŋ33thep42 rɔɔn45 lɛɛw45  
 Sunan think comp Bangkok be hot part  
 'Sunan thinks Bangkok is hot!'

**Assertion**: Sunan thinks that Bangkok is hot

**Purported presupposition**: 1) There was a definite city named Bangkok.

2) It was expected not to be hot.

**What projects**: 1) There was a definite city named Bangkok.

2) It was expected not to be hot.

Considering the projective contents of *lɛɛw45* in general, in (299) the particle is supposed to imply that previously Bangkok was in the state of being not hot and was expected to remain in this state. Nonetheless, these implications are not derived from the utterance. According to the context, the speaker was not in Bangkok before the reference time and did not have any background knowledge concerning the temperature of the city in the previous days. The speaker's use of *lɛɛw45* indicates that an expectation regarding Bangkok's temperature is part of her background knowledge. Nevertheless, this expectation does not refer to the temperature of Bangkok on the previous day. It possibly refers either to the temperature in Berlin on the day the speaker departed the city or to the standard temperature of Bangkok at this time of year. This case seems to suggest that the use of *lɛɛw45* is not straightforwardly related to counter-expectation. Rather, it exhibits a contrast between an existing proposition in the common ground and the asserted proposition.

The results from Tonhauser et al.'s tests show that even though *lɛɛw45* imposes a Strong Contextual Felicity constraint it is not truly bound to Obligatory Local Effects. In

addition, it is not clear cut which part of the projective contents associated with *leew45* has an Obligatory Local Effect.

#### 5.4 CONCLUSION

This chapter presents an appraisal of *leew45*'s implications, which will contribute to the account of the operation of *leew45* as a marker of counter-expectation. Using Geurts' (1999) Presupposition Test Battery, Levinson's (1983) presupposition tests and Tonhauser et al.'s (2013) projection tests, the presupposition about the previous expectation concerning the issue under discussion, which constitutes a key condition of use, has been examined to see if it behaves in a standard way. Interestingly, the tests reveal in some cases that *leew45* behaves in the same way as a standard presupposition; yet there are still cases in which its appearance indicates some additional features of presuppositions which do not conform to the standard idea. The results from Geurts' Presupposition Test Battery showed that *leew45*'s implications survive in all variants of sentences and also when the particle is embedded in the subordinate clause of a sentence.

Regarding the results from Levinson's presupposition tests, while the presupposed definiteness of the subject persists, the presupposed expectation does not project when *leew45* is placed in an interrogative sentence with VP-level negation. The case with the question particle *rw45yan33* does not truly suggest the non-projective property of the expectation, as the question particle itself introduces an expectation and its contrast with the expectation triggered by *leew45* possibly represents presupposition cancellation. Similarly, the examples with VP-level negation do not show the projective behaviour of *leew45* as the particle is not under its scope. The projective behaviour of *leew45* is revealed in the results of Tonhauser et al.'s projection tests. The tests showed that *leew45* is context-sensitive and imposes a Strong Contextual Felicity constraint. However, they also indicated that the particle was acceptable in the contexts where the projective contents were ignored by the attitude bearer and where they were not entailed.

In Chapter 6 the use of *leew45* at the discourse level will be addressed. The influence of common ground, context, and information structure on the generation of *leew45*'s counter-expectation will be pointed out. The chapter will also propose the mechanism of the Question Under Discussion as a device to account for both the production and interpretation processes of *leew45*'s counter-expectation when common ground, context, and information structure interact.

## Chapter 6

### Information Structure and Coherence

Chapter 5 has presented the characteristics of *lɛɛw45*'s counter-expectation. Basically, this counter-expectation was defined under the condition that the proposition attached with the particle presents an altered state of knowledge which contrasts with the expectation present in the old state of knowledge. It has also pointed out the characteristics of *lɛɛw45*'s projective meaning, which imposes a Strong Contextual Felicity constraint but is not bound to Obligatory Local Effect; its presence in the context where the projective contents are not entailed is also felicitous. The current chapter will present the use of *lɛɛw45* at the discourse level, which shows further issues beyond semantic restrictions. The data which show the use of the particle in real situations reveal that coherence and information structure are also factors that have crucial effects on the production and interpretation of *lɛɛw45*'s counter-expectation. It indicates that the coherence between the target proposition and the proposition that counters it needs to be identified and that the influence of the information structure should be taken into account. The influences of coherence and information structure are presented through the two problematic cases, as shown in (300) and (301). Concerning the issue of coherence, the problematic case restated in (300) reveals that there are certain restrictions on the asserted proposition that is created by the speaker in order to create a contrast with the proposition under expectation which lies in the antecedent.

- (300) A:    thuk45khrɔŋ45   da33nay33   ca22   kin33   yaa33paa33raa33  
           every time       Danai       FUT   eat     paracetamol  
           'Every time, Danai takes paracetamol.'
- B:    #khrɔŋ45nii45   khaw24   kin33   yaa33paa33raa33   taam33   thii42  
           this time       he       eat     paracetamol       follow   COMP  
           mɔɔ24   saŋ22   lɛɛw45  
           doctor order   PART  
           #'This time he took paracetamol as prescribed by the doctor.'

Taking the construction of (300B) into account, the sentence is acceptable in the sense that it denotes a counter-expectation which contrasts with the expectation; that is, formerly it was expected that Danai would not take paracetamol as prescribed by the doctor. Nonetheless, with the presence of the antecedent in (300A) a specific context is established

and (300B) becomes unacceptable. Another problem which concerns the influence of information structure is restated in (301):

(301) A:   da33nay33   day42   rian24thoꝋ33   way42naam45   lɛɛw45  
           Danai       get       gold medal       swimming       PART  
           Danai has won a gold medal in swimming!'

B:    i)       rian24thoꝋ33!  
               gold medal  
               'Gold medal!'  
       ii)      da33naay33   ʔa22na45  
               Danai        QW  
               'Danai?!'

The situation in (301) reveals the influence of the information structure on the interpretation of *lɛɛw45*'s counter-expectation. The utterance in (301A), which is uttered out of the blue, welcomes two different interpretations. As a consequence, both (301Bi) and (301Bii) are possible replies to it. This phenomenon shows that a sentence with *lɛɛw45* does not always present only one distinct counter-expectation. Rather, in some cases it triggers different interpretations which result in different counter-expectations. The expectation and what counters it are identified through the focused elements present in the two propositions. These foci call for interpretations that comply with the common ground knowledge and contexts available on the part of the addressee.

This chapter presents an examination of the above two cases and in the end proposes that in real situations, it is not always the case that the use of *lɛɛw45* is determined solely by the semantics of the particle. Both the expression and interpretation of a counter-expectation denoted through *lɛɛw45*, however, also rely on the association of the particle with the focused element. In addition, the felicity of the particle is also controlled by the coherence between the proposition under expectation and the asserted proposition. The latter is intended by the speaker to counter the expectation. This chapter proposes Question Under Discussion or QUD, as the technique for coherence formation and the identification of focus both in the antecedent and the proposition that counters it.

The structure of this chapter is as follows. In Section 6.1 the interrelationship of focus, context and common ground is discussed. The theoretical background on QUD and its relationship with focus is presented in Sections 6.2 and 6.3, while the formation of a counter-expectation through questions is discussed in Section 6.4. Solutions to the problems concerning coherence and the association of *leew45* with focus are provided in Sections 6.5 and 6.6.

## 6.1 FOCUS, CONTEXT, AND COMMON GROUND

The identification of focus and its relationship with context and common ground can be carried out with the assistance of Roberts' (1996, 2012) Question Under Discussion. Basically, a focus is considered the answer to the question under discussion, which is determined by context and common ground. For example, the question '*Who won the singing contest last night?*' is set in accordance with a particular part of the common ground in which there was a singing contest and it took place last night. Both the speaker and the addressee are directed to it. The question word *who* implies that someone won the contest. It invokes all plausible alternatives. Focus is the alternative which is selected as the answer to this question. Focus, context, and common ground relate to one another and this relationship can be depicted with the application of the QUD.

### 6.1.1 Focus

In some past studies such as those of Chomsky (1971), Jackendoff (1972) and Lambrecht (1994), focus is defined based on the availability of a presupposition in the sentence. A presupposition is widely considered the information that the speaker assumes to be shared between her and the addressee. Focus, on the other hand, is the non-presupposed part of the information in a sentence. Chomsky (1971) provided an extended explanation on this, which stated that the identification of focus and presupposition can be made via intonation. The intonation centre is placed on the focus. However, identifying a focus by means of intonation does not apply to every language as in some languages the focus is not marked by stress or intonation.

In this study, the investigation of the role of focus in the operation of *leew45* will not be based on the notion of focus as the non-presupposed information. Rather, it will follow the definition of focus proposed by Rooth (1985, 1992) which was developed from

Alternative Semantics. Under this semantic perspective, focus is a member of a set which contains all alternatives that are relevant to the issue under discussion. The set of alternatives is established from substitution made at the position in the sentence that receives focus. The formation of the set can be clarified through a question and answer, as shown in (302):

- (302) A:     What will Danai bring for the party tonight?  
           B:     He will bring two bottles of Provençal red wine.

The set of alternatives in the case of (302) is formed by the question in (302A). The question word *what* represents all plausible alternatives, while the remaining components of the question determine the specific properties that the alternatives in the set must contain. The question suggests that Danai will bring  $x$  for the party tonight, where  $x$  refers to the plausible alternatives which include the potential objects that Danai will bring for the party tonight.  $x$  also represents the component in the sentence on which the focus is placed. The objects that can substitute  $x$  at this position are qualified as the alternatives of this set. The alternative that finally appears in (302B) is the selected alternative which receives focus.

Erteschik-Shir (2007) pointed out that although Rooth's notion of focus was developed from Alternative Semantics, it still reveals the relation between focus and presupposition proposed in the previous literature. A question establishes a set of alternatives; its components designate the properties of the plausible alternatives. These components represent the presupposition or the information that, according to the assumption of the speaker, is shared by both the speaker and the hearer. While the question manifests the presupposition, the presupposition determines the characteristics of the alternatives that are eligible to be selected as a focus. A similar remark was made by Partee (1991), according to whom the presupposed and non-presupposed information in the sentence represent topic and focus, respectively. The topic plays a role as the restrictive clause while the focus serves as the nuclear scope.

Focus can be generally categorised into two types: contrastive or identificational focus and non-contrastive or informational focus. They can be recognised simply through two different types of questions, as shown in (303) and (304):

(303) Which wine did Danai bring to the party last night, the Provençal red wine or the Chardonnay white wine?

(304) What drinks did Danai bring to the party last night?

The question in (303) presents a contrastive focus. In this case the question offers contrasting alternatives, one of which will be selected as the focus, while the other will be discarded. In contrast, in the question in (304) a set of contrast alternatives is not offered. The set of plausible alternatives is large and not restricted to some particular alternatives, which are considered the subsets of the entire set of alternatives. The selected alternative is thus aimed at providing information to the addressee, not at contrasting and eliminating the other alternative as in the case of contrastive focus.

Focus is identified or marked by various means. For example, in English the focus in the sentence is marked by stress, as exhibited in (305):

(305) Danai is a fan of [the ProvenÇAL]<sub>F</sub> red wine.

The core stress is on *the Provençal* which indicates that the focus of this sentence is *the Provençal*. The sentence suggests that Danai is a fan of type *x* of red wine. The focused *the Provençal* is the alternative that is selected from a set of alternatives that can be substituted for *x* in *Danai is a fan of the type x of red wine*.

Focus can be overtly marked with the assistance of morphological devices. This means of focus marking is evident, for example, in Gürùmtùm (West Chadic). An example is given in (306) in which the foci are marked with the focus marker *à*.

(306) Tí    bà    wúr    má-ì    à    kwá  
 3SG PROG bring water-DEF FOC who  
 'TO WHOM is he bringing the water?'

Tí    bà    wúr    má-ì    à    báa-sì  
 3SG PROG bring water-DEF FOC father-his  
 'He is bringing the water TO HIS FATHER.'

Nevertheless, languages like Thai and English do not require obligatory focus marking. Thus, focus identification relies heavily on context. Consider (307):

- (307) da33naay33 kin33 thu45rian33 mua42chaw45nii45  
 Danai eat durian this morning  
 'Danai ate durian this morning.'

Without any clues from stress or any other phonological devices, focus can fall on any element in the above sentence. The sentence thus leads to four possibilities of interpretation, as listed in (308). The bold letters indicate foci.

- (308) (i) x ate durian: **Danai** ate durian this morning.  
 (ii) Danai did x this morning: Danai **ate durian** this morning.  
 (iii) Danai ate x this morning: Danai ate **durian** this morning.  
 (iv) Danai ate durian at x: Danai ate durian **this morning**.

As the case above shows, focus identification in the languages that do not rely on overt focus marking depends on context. Context and common ground knowledge determine the properties of the focus as well as the remaining alternatives in the set. The interaction of context, common ground and focus will be discussed in detail in the next section.

Focus can also be located by pragmatic means. Pragmatics comes into play when focus does not correspond straightforwardly to the question that normally facilitates the identification of focus. An example is provided in (309):

- (309) Q: Where is the book?  
 A: I gave it to Mary. (Erteschik-Shir 2007:39)

The focus identifying sentence *'The book is at/in/with x'* can be drawn from the question. The sentence is supposed to evoke all plausible alternatives that can be substituted for *x*, which include the any places where the book possibly is. The answer is supposed to give a reply that explicitly names the place. However, it does not follow this; instead, it provides the answer in an indirect manner. It addresses the speaker's action of giving the book to Mary. This implies that the book is now with Mary. The implication is derived through the mapping of the person to whom the book was given to the place where the object currently



is. This mapping is clearly enabled with the assistance of pragmatics.

### 6.1.2 Common ground and context

Common ground is generally defined as the information that is mutually shared between the speaker and the addressee (Karttunen 1974; Stalnaker 1974, 2002). It is accumulated over the previous communications between the two parties. The basic use of common ground is exhibited in (310):

(310) The cat has disappeared.

In this case, the common ground content is denoted by the definite article *the*. It brings about the presupposition that the cat being addressed in the sentence is not any cat in the world but a specific cat that both the speaker and the hearer know. The existence of this cat as well as the information about it has been acknowledged by both interlocutors in their previous conversations and has become their common knowledge. Apart from signalling the existence of the cat being discussed, the semantic property of the article *the* yields a semantic effect on the truth-conditions of the sentence. The sentence is true if and only if the presupposition concerning the existence of the cat is valid and accepted by both interlocutors; otherwise it is false and accommodation is called for.

However, according to Stalnaker (2002), the use of common ground does not always involve the validity of the sentence in terms of the semantic truth-conditions. In the case of (310), it is also possible that the sentence is uttered in order not only to say something about the cat as the sentence literally suggested but also with some communicative aims. Possibly, the speaker wants to urge the hearer to find the cat. Alternatively, he probably wants to relieve the hearer's worry that the cat will mess up her garden again.

Grice (1967) proposed that an expression is used by the speaker in order to convey a particular message to the hearer. The purpose of the speaker thus shapes the construction of the sentence that the speaker produces. In addition, the speaker also expects to receive a response from the hearer to the message that he/she sends. In order for the communication to be successful both the speaker and the hearer, or all of the participants in the conversation, need to attain the shared information that facilitates the comprehension of the conveyed message.

Following Grice's idea, Stalnaker (2002) proposed the pragmatic view of common ground, saying that the common ground is the speaker's presupposition; it is the information that shapes both the speaker's intention of conveying a message and the addressee's interpretation that meets the speaker's intention. Common ground information is generally recognised as the information that is shared by the speaker and the addressee. This recognition is not purely influenced by syntactic or semantic features but is rather in accordance with the views of the speaker. Common ground information refers to the information that is presupposed or taken for granted; it represents the presupposed information that the speaker assumes to also be presupposed by the addressee or other participants in the conversation.

Based on the pragmatic notion of common ground, if the hearer does not share the information about the speaker's cat in the speaker's utterance in (311), the conversation is probably impeded unless accommodation is implemented.

(311) Danai: I think my cat should be on a diet.

Thida: Don't be too serious. Bailey doesn't look fat at all!

Danai: Do you think so?

Considering Danai's utterance from the semantic perspective, the direct meaning obtained from it is that Danai has a cat and he is of the opinion that it should be on a diet. Regarding the presupposition and common ground, the sentence presupposes that Danai has a cat. The communication will fail if this piece of information is not shared by Thida. However, in fact Danai does not want only to report or narrate something about his cat. Taking Thida's response into account, the utterance indicates her opposition to Danai's opinion. Therefore, it is plain to see that Danai's intention in uttering the sentence is to ask for Thida's opinion on his idea to put the cat on a diet. Thida realises Danai's intention and gives a response in accordance with it. Considering presupposition and common ground, uttering the sentence Danai assumes that Thida acknowledges that he has a cat. Considering Thida's response, she does acknowledge that Danai has a cat; otherwise she would not be able to address it using its name.

The case in (311) is intriguing in that it exhibits both the semantic and pragmatic uses of common ground by the participants in the conversation. According to Krifka (2007), common ground can be reflected in two facets according to the way it is used. The semantic use of common ground involves the common ground content, whereas the

pragmatic use of it reveals the common ground management.

In (311), in order for the communication in the case above to succeed, first and foremost, the presupposition regarding the existence of Danai's cat must be held by both Danai and Sunan. Furthermore, Danai's goal of conveying his message cannot be fulfilled unless both the existence of the cat and the goal are not assumed also by Sunan. The existence of the cat represents common ground content which yields the semantic effects regarding the truth-conditions of the sentence. Danai's aim in expressing the sentence, on the other hand, portrays the management of common ground. He makes use of common ground, that is, the existence of his cat, in order to direct his utterance in a way that it will motivate Sunan to express her opinion about his idea of implementing the diet scheme on the feline. Danai's common ground management does not affect the semantic truth-conditions of the sentence he utters. Rather, it determines the fulfilment of his communicative goal.

Besides common ground, the communication between the speaker and the hearer is shaped by context. As proposed by Stalnaker (1973), context is determined by the information shared by the interlocutors in the conversation or, in other words, by common ground information. Contexts are thus all possible situations in which any relevant communicative goals are accomplished based on the common ground information. Accordingly, context, common ground, and communicative purposes are interdependent. The communicative purpose of the speaker is set up in accordance with the interrelationship of context and common ground. (311) shows that the utterance of a sentence is context-dependent; it is uttered only in the context that is formed from the common ground information and is thus mutually accepted by the speaker and the hearer. Accordingly, context plays a dual role; it determines the possibilities for the speaker's communicative goals while at the same time facilitate the hearer's interpretation. Without it, the communication is probably obstructed. The information that is conveyed and interpreted successfully in the context mutually acknowledged by the speaker and the hearer is eventually added into the common ground. The updated common ground then forms a new context which will be useful for subsequent discourses.

The importance of context is evident in the puzzling issue concerning the representation of context which is raised by Kamp (1988). In some cases, the expression of a sentence is not simply restricted to only one context. Rather, it is in fact compatible with various contexts. Referring to (311), the common ground content or the semantic use of common ground containing the presupposition that there is a cat that both interlocutors

know does not restrict the use of the sentence to only one context. The sentence can be uttered in many contexts in which the existence of the cat is mutually presupposed by the interlocutors. Some possible contexts where (311) is felicitous are displayed in (312). Although the contexts differ, (311) is acceptable in both of them. Conversely, it will be infelicitous in both cases if relevant common ground information about the cat is rejected by either participant in the conversation and a proper context is not successfully established.

- (312) (i) Context: There is a black stray cat and it pays a short visit to Danai's house every day. However, Danai has not seen it for days and he suspects the animal has disappeared. He then informs Sunan about its disappearance.

Danai: The cat has disappeared.

Sunan: How come?

- (ii) Context: There is a cat and Danai is very fond of it. It visits his place every day and playing with it has become one of his daily activities. However, Danai has not seen it for days and he suspects the animal has disappeared. He then sadly informs Thida about its disappearance.

Danai: The cat has disappeared.

Sunan: Oh, no. I'm so sorry to hear that.

Note that the hearer's interpretation and reaction to the speaker's utterance rely on the representation of context. A mismatch between the speaker's context and the hearer's context results in a communication failure.

What can be drawn from the above cases is that a sentence is supposed to be consistent with the context of the discourse being made. Also, the context in which it is uttered needs to correspond to the common ground of the participants in the conversation.

### **6.1.3 The interaction of focus, common ground, and context**

The earlier sections of this study have discussed how the core information of the sentence is conveyed through focus and how the construction of the sentence is shaped by common ground and context. This section presents the interaction of these three components in the

information structure with the aim of identifying the production and interpretation processes.

As stated, focus represents the alternative which is selected from a set of alternatives and carries the core information in the sentence. This is also exhibited in the two English examples in (313) and (314):

(313) A: What did the manager send to his daughter?  
 B: The manager sent [a POSTcard]<sub>F</sub> to his daughter.

(314) A: Who did the manager send a postcard to?  
 B: The manager sent a postcard to [his DAUGHter]<sub>F</sub>.

Both examples clearly display that the foci are the substitutes for the question words *what* and *who* which encompass the information that A, who asks the questions, is seeking from B. The question in (313) is based on the common ground that the manager sent something to his daughter, whereas the question in (314) is set up from the common ground that the manager sent a postcard to someone. Accordingly, A's utterances in (313) and (314) are constructed under the context that she wants to acquire information on the object that the manager sent to his daughter and the person to whom the manager sent the postcard, respectively. The focused elements in both situations exhibit the correct matchings of the common ground and context shared by A and B. As a consequence, foci are assigned to the components in B's sentences that meet the communicative goals set by A. Semantically, the sentences uttered by B in both situations have the same truth conditions; that is, the sentence is true if and only if there is a definite manager that both A and B know and the manager sent a postcard to his daughter.

However, different focus locations in the sentence offer different truth conditions when a focus-sensitive particle appears (Roots 1985; Krifka 2007). Consider (315) and (316), in which the focus-sensitive particle *only* is present:

(315) The manager only sent [a POSTcard]<sub>F</sub> to his daughter.

(316) The manager only sent a postcard to [his DAUGHter]<sub>F</sub>.

With different foci, the two sentences have different truth conditions, as shown in (317) and (318):

(317) (315) is true if and only if there is a definite manager who sent something to his daughter, which was nothing else but a postcard.

(318) (316) is true if and only if there is a definite manager who sent a postcard to someone, who was no one else but his daughter.

The sentences in (315) and (316) portray the interactions between *only* and two different foci. The exhaustivity implied in the semantics of *only* applies to two different components in the sentence, which results in different truth conditions. Such cases as (315) and (316) oppose the idea of Chafe (1976) concerning information structure, which broadly defined information structure as the packaging of information which corresponds to the hearer's mind.

Krifka (2007) proposed that the phenomena occurring in (315) and (316) indicate the different uses of focus in forming the content and in facilitating information packaging. The former represents the pragmatic use of focus, which concerns the communicative goals of the discourse, while the latter suggests the semantic use of focus, which involves the truth conditions of the sentence. The two uses of focus also relate to common ground. This relation refers to common content and common ground management that have been discussed in the previous section. The semantic use of focus manifests the employment of common ground in order to construct the content of the sentence. A wrong focus results in factual information that is not supposed to be delivered to the hearer. On the other hand, the pragmatic use of focus illustrates the management of common ground for the purpose of the communication. It helps create the cognitive representation that the participants in the conversation rely on when the utterance is produced and interpreted. Assigning a focus to the wrong component that does not comply with the purpose of the speaker thus impedes the communication.

## 6.2 QUESTION UNDER DISCUSSION

In Section 6.1 the interaction of focus, common ground, and context have been discussed. The section also reveals the influence of this interaction on the production and

interpretation of language. In languages in which focus is overtly marked, the interaction is easily recognised. Nevertheless, in languages which do not require overt focus marking like Thai, identifying focus or even common ground and context is complicated in some cases. Due to this possible obstacle, there is a need for a device which facilitates the identification while at the same time displaying the speaker's production and the hearer's interpretation processes. The current section introduces the Question Under Discussion technique which is applied in order to account both for the tripartite interaction and the production and interpretation processes.

The expression of language can be regarded as a tool to accomplish a communicative goal. According to Stalnaker (1979), a discourse is produced primarily as a means to ask for information and is engaged in by all participants in the conversation. Roberts (1996), following Stalnaker's idea, related the production of discourse to a game. She proposed that a conversational goal is set up based on the common ground and context. As discussed, common ground refers to the information that all interlocutors accept to be true and is gradually gathered along with the discourses that have been made. It determines the contexts which represent the possible worlds in which the common ground information is true. The conversational goal requires mutual commitment from the speaker and the hearer. It resembles the elimination of the irrelevant contexts in the set in order to form a singleton set of the context that corresponds to the conversational goal. The goal is realised by abiding with rules which involve many linguistic factors. Conventional rules refer to the linguistic features, that is, syntactic, semantic features, and so on, which offer the sentence structure that matches the goal. On the other hand, conversational rules conform to Grice's conversational maxims. Roberts also includes Carlson's (1983) conversational moves in the QUD. Set-up and pay-off moves are made by the interlocutors of a conversation in the pursuit of accomplishing the conversational goal. These comply with rules and correspond to the goal. Set-up moves are questions while payoff moves are the answers to questions, that is, assertions. In order to acquire the information, which is the goal of the conversation as proposed by Stalnaker, a question is asked. An answer is made in response to the question and is supposed to deliver the information being inquired about. The question represents the topic being discussed in the conversation and is thus considered the question under discussion.

QUD is basically developed from the accounts for question in general proposed by Hamblin (1973), Groenendijk and Stockhof (1984), and von Stechow (1991). The fundamental mechanism of the QUD is in line with the classic account for questions

proposed by Hamblin (1973), which says that a question represents a set of alternatives or *q-alternatives* that relate to the question itself. In this sense, the content of a particular question designates the qualifications of all plausible alternatives and induces a set of alternatives that are eligible to be selected as the definitive answer to the question. Accordingly, the alternatives that lack the designated properties are excluded from the set. Following this account, therefore, the set of q-alternatives in (319b) is qualified for the selection of the answer requested by (319a) while the q-alternative set in (319c) is discarded.

- (319) a. Who moved the vase in the living room?  
 b. {Danai, Sutha, Thani}  
 c. {sofa, door, radio}

Turning the account for question as denoted in the mechanism of the QUD into formalities, basically the set of q-alternatives for a *wh*-question is established by abstracting the *wh*-phrase present in the *wh*-question and applying it to any entity that contains the properties identified in it, as shown in (320):

(320) The *q-alternatives* corresponding to utterance of a clause  $\alpha$ :

$$\text{q-alt}(\alpha) = \{p: \exists u^{i-1}, \dots, u^{i-n} \in D[p = |\beta| (u^{i-1}) \dots (u^{i-n})]\}$$

where  $\alpha$  has the logical form  $wh_{i-1}, \dots, wh_{i-n}(\beta)$ , with  $\{wh_{i-1}, \dots, wh_{i-n}\}$

the (possibly empty) set of *wh*-elements in  $\alpha$ , and

where  $D$  is the domain of the model for the language, suitably sortally restricted,

e.g., to humans for *who*, non-humans for *what*

(Roberts 2012:10)

The q-alternative set, which represents the denotation of a question is given in (321):

(321) The interpretation of a question  $?(\alpha)$ :

$$|?(\alpha)| = \text{q-alt}(\alpha) \quad (\text{Roberts 2012:11})$$

The denotation of the question in (322) is derived in (323):

(322) What did Danai buy?



$$\begin{aligned}
 (323) \quad |?(what(\lambda x.Danai \text{ bought } x))| &= q\text{-alt}(what(\lambda x.Danai \text{ bought } x)) \\
 &= \{p: \exists u \in D [p = |\lambda x.Danai \text{ bought } x| (u)]\} \\
 &= \{Danai \text{ bought } u: u \in D\}
 \end{aligned}$$

Considering the realistic possibility of the appropriate answer, the answer to the question in (322) possibly involves two propositions,  $p$  and  $p'$ . Suppose only Danai, a shirt, and a belt are involved here and thus  $D = \{\text{Danai, a shirt, a belt}\}$ , proposition  $p$  and  $p'$  here are thus *Danai bought a shirt* and *Danai bought a belt*, respectively. In order to account for such a possibility, Roberts includes the idea of Groenendijk and Stockhof (1984), which introduces the operation of partitions. Set up by the q-alternatives over a set of worlds, the partitions provide both partial and complete answers to a question. With partitions, the set of alternatives for the question in (322) resembles the set of alternatives shown in (324) and represents the set in (325):

$$\begin{aligned}
 (324) \quad &\{\text{Danai bought a shirt and a belt, Danai bought a shirt but did not buy a belt, Danai} \\
 &\text{did not buy a shirt but bought a belt, Danai bought nothing}\}
 \end{aligned}$$

$$(325) \quad \{(p \wedge p'), (p \wedge \sim p'), (\sim p \wedge p'), (\sim p \wedge \sim p')\}$$

Regarding the evaluation of the answer to a question, semantically, the interpretation of the question is in accordance with the q-alternative set of the question  $q\text{-alt}(\alpha)$  which determines the properties of the plausible answers. The definitive answer is thus required to exhibit the properties identified in the  $q\text{-alt}(\alpha)$  of the question. There are two types of answers; namely, complete answers and partial answers. An answer is evaluated through the entailment of the truth values of the properties identified in  $q\text{-alt}(\alpha)$ . This evaluation is defined by Roberts (2012:11) as shown in (326):

- (326) a. A *partial answer* to a question  $q$  is a proposition which contextually entails the evaluation—either true or false—of at least one element of  $q\text{-alt}(q)$ .
- b. A *complete answer* is a proposition which contextually entails an evaluation for each element of  $q\text{-alt}(q)$ .

Each complete answer must entail the truth value of at least one cell in the above set and exclude all other cells. In contrast, a partial answer rejects at least one of the cells. *Danai did not buy a belt* is the partial answer that rejects the cells in which  $p'$  is true. Whether Danai bought a shirt is left as an open question.

### 6.3 QUD AND INFORMATION STRUCTURE

This section addresses the mechanism of the QUD when information structure, especially focus, comes into play.

Section 6.1.1 discussed the definition of focus in the information structure as an alternative that is selected from a set of alternatives compatible with common ground information, context, and conversational goal. The basic interaction between the QUD and focus is formed through the phenomenon in which the set of alternatives is established from the substitution of each alternative with the variable which resembles the question word in a question. Furthermore, Roberts (1996) pointed out the relationship of focus, questions, answers, q-alternatives, and focus alternatives based on the concept of the agreement of questions and answers proposed by von Stechow (1989). This concept states that an answer is harmonious to a question if and only if the focus alternatives that are evoked from it are the q-alternatives determined by the question. In other words, the focus alternatives and the q-alternatives invoke the same set of alternatives. Following this concept, (327) is the answer to the question in (328). Both the question and answer invoke the set of fruit as shown in (329). (327), which is the complete answer to (328), discards the remaining alternatives.

(327) Danai dislikes durian and melon.

(328) What kind of fruit does Danai dislike?

(329) {pineapple, mango, durian, rambutan, melon, ...}

Given the congruence of questions and answers stated above and that the QUD comprises a question which acts as a move in order to accomplish the conversational goal, the focused element of a sentence is thus considered an answer to the QUD. Definitely, both focus and the QUD comply with common ground knowledge and context in the sense that the set of

alternatives that focus and QUD similarly evoke is formed under the pragmatic influence of common ground knowledge and context.

The congruence of focus and QUD explains why some answers or assertions are not acceptable with particular questions. This is exemplified in (330):

(330) Sunan: What does the cat that Thani has recently bought look like?

Danai: !He bought it from a cat breeder.

Even though Danai's utterance possibly represents a proposition that is true according to fact, it is not an answer to Sunan's question. The conversational goal of Sunan at the time of discourse is to inquire about the appearance of the cat that Thani has bought. Thus, Sunan's question is not a question in general but a QUD which depicts the goal of the conversation. The hearer is supposed to recognise the goal and be cooperative in achieving the goal; that is, to assert the proposition that is the answer, either complete or partial, to the QUD. Clearly, Danai's assertion in (385) is unacceptable as an answer to the QUD asked by Sunan. The reason is that, the QUD and the set of q-alternatives induce different sets of alternatives—that is, the set of the features of the cat versus the set containing the ways the feline was acquired. Such conflict results in the unacceptability of Danai's utterance.

Concerning the congruence between a question and its set of q-alternatives, the QUD relies on the influence of common ground, as proposed in von Stechow's (1991) account of a question. The content of a question corresponds to common ground knowledge and thus determines the properties of all plausible variables. The operation of the QUD in this regard is exemplified in the following situation, where the speaker wants to acquire additional information regarding the issue under discussion. Suppose both Danai and Sunan acknowledge that Thani has recently acquired a cat. However, Sunan does not retain further information and only Danai has obtained it. Sunan is aware of this fact and thus thinks that Danai can be a good source of information. Her primary curiosity is about the appearance of the cat. The question that she is going to ask is thus supposed to accomplish the conversational goal that will bring about the information about the appearance of the cat. The dialogue between these two people takes place as shown in (331):

(331) Sunan: What does the cat that Thani has recently bought look like?

Danai: It is a male Siamese cat.

Realistically, a discussion possibly involves not only one broad topic but also some other subtopics. For example, a discussion on a party might not cover only the broad topic of what happened at the event in general. Instead, it probably includes the subtopics about the people that attended the party and the activities they were engaged in there. In such a case, any issues under discussion can be traced through questions, and both the major topic and the subtopics can be reflected through, as termed by Roberts (1996), the superquestion and the subquestions, respectively. Following Groenendjik and Stokhof (1984), a question  $Q_1$  entails another question  $Q_2$  if all of the propositions that act as the answers to  $Q_1$  are the answers of  $Q_2$  as well. Applying this rule, Roberts proposed that the superquestion resembles  $Q_1$  in the sense that it entails the subquestion, which in this regard is similar to  $Q_2$ . Nonetheless, owing to the two types of answer which are under the influence of common ground and context, Roberts (1996:9) further defines the evaluation of an answer to a question as stated in (332) below:

(332) A question  $q1$  **contextually entails** another  $q2$  iff answering  $q1$  in a discourse context with common ground  $c$  (a set of propositions) is such that  $c \cup \text{answer}(q1)$  entails a complete answer to  $q2$ .

Concerning the operation of the QUD, let us suppose that there is a situation in (333) which involves four arguments—namely, Danai, Thani, World Cup, and Wimbledon—and addresses the people and the programmes they watched. The situation addresses both a major topic and two subtopics, which also lead to further subsubtopics. All of the topics are arranged into a stack of questions given in (333). Assuming the concept of superquestion and subquestion, the QUD, as proposed by Roberts, functions as demonstrated in (334):

(333) 1. Who watched what?

a. What did Danai watch?

i. Did Danai watch the World Cup?

Ans( $a_i$ ) = yes

ii. Did Danai watch Wimbledon?

Ans( $a_{ii}$ ) = yes

b. What did Thani watch?

i. Did Thani watch the World Cup?

Ans( $b_i$ ) = yes

ii. Did Thani watch Wimbledon?

Ans( $b_{ii}$ ) = yes

(334)	QUD (1)	=	$\emptyset$	
	QUD(a)	=	$\langle 1 \rangle$	
	QUD( $a_i$ )	=	$\langle 1, a \rangle$	
	QUD(Ans( $a_i$ ))	=	$\langle 1, a, a_i \rangle$	
	QUD( $a_{ii}$ )	=	$\langle 1, a \rangle$	
	QUD(Ans( $a_{ii}$ ))	=	$\langle 1, a, a_{ii} \rangle$	
	QUD(b)	=	$\langle 1 \rangle$	
	QUD( $b_i$ )	=	$\langle 1, b \rangle$	
	QUD(Ans( $b_i$ ))	=	$\langle 1, b, b_i \rangle$	
	QUD( $b_{ii}$ )	=	$\langle 1, b \rangle$	
	QUD(Ans( $b_{ii}$ ))	=	$\langle 1, b, b_{ii} \rangle$	(2012:18)

Roberts defines the function of the QUD in terms of information structures as shown in (335):

(335) QUD, *the questions-under-discussion stack*, is a function from  $M$  (the moves in the discourse) to ordered subsets of  $Q \cap Acc$  (the set of accepted setup and payoff moves in  $M$ ) such that for all  $m \in M$ :

i. For all  $q \in Q \cap Acc$ ,  $q \in QUD(m)$  iff

1.  $q < m$  (i.e. neither  $m$  nor any subsequent questions are included), and
2.  $CG(m)$  fails to entail an answer to  $q$  and  $q$  has not been determined to be practically unanswerable.

ii.  $QUD(m)$  is (totally) ordered by  $<$ .

iii. For all  $q, q' \in QUD(m)$ , if  $q < q'$ , then the complete answer to  $q'$  contextually entails a partial answer to  $q$ .

(2012:14-15)

Considering the situation in (331), which asks about the appearance of Thani's cat in general, the superquestion is multiplied to some subquestions that inquire about the specific features that make up the cat's overall appearance. It entails some subquestions listed in (336). Suppose that each of the q-alternative sets for Subquestions a, b, c and d contains only two alternatives, the list of questions in (336) makes up the full question stack, as shown in (337), the complete order of which, as determined by the ordering function  $<$ , is provided in (338):

- (336) (i) Does it have long hair?  
 (ii) What colour is it?  
 (iii) What is the colour of its eyes?  
 (iv) Is it a male or a female?

(337) 1. What does the cat that Thani has recently bought look like?

- a. What type of hair does it have?  
 a<sub>i</sub>. Does it have long hair?  
 Ans(a<sub>i</sub>) = No  
 a<sub>ii</sub>. Does it have short hair?  
 Ans(a<sub>ii</sub>) = Yes
- b. What colour of hair does it have?  
 b<sub>i</sub>. Does it have black hair?  
 Ans(b<sub>i</sub>) = No  
 b<sub>ii</sub>. Does it have brown hair?  
 Ans(b<sub>ii</sub>) = Yes
- c. What colour of eyes does it have?  
 c<sub>i</sub>. Does it have blue eyes?  
 Ans(c<sub>i</sub>) = Yes  
 c<sub>ii</sub>. Does it have yellow eyes?  
 Ans(c<sub>ii</sub>) = No
- d. What gender is it?  
 d<sub>i</sub>. Is it a male?  
 Ans(d<sub>i</sub>) = Yes  
 d<sub>ii</sub>. Is it a female?  
 Ans(d<sub>ii</sub>) = No

(338)  $\langle 1, a, a_i, \text{Ans}(a_i), a_{ii}, \text{Ans}(a_{ii}), b, b_i, \text{Ans}(b_i), b_{ii}, \text{Ans}(b_{ii}), c, c_i, \text{Ans}(c_i), c_{ii}, \text{Ans}(c_{ii}), d, d_i, \text{Ans}(d_i), d_{ii}, \text{Ans}(d_{ii}) \rangle$

Based on the relation of questions and answers mentioned earlier, Roberts defines the strategy of inquiry or the strategy to answer  $q$  in the sense of the QUD as shown in (339). The strategy prompts the establishment of subinquiries to  $q$  which brings about the function shown in (340). The strategy to answer 1 is to answer  $a$  by answering  $a_i$  and  $a_{ii}$  and to answer  $b$  by answering  $b_i$  and  $b_{ii}$ .

(339) The *strategy of inquiry* which aims at answering  $q$ ,  $\text{Strat}(q)$ :

For any question  $q \in Q \cap \text{Acc}$ ,  $\text{Strat}(q)$  is the ordered pair  $\langle q, S \rangle$ , where  $S$  is the set such that:

If there are no  $q' \in Q$  such that  $\text{QUD}(q') = \langle \dots q \rangle$ , then  $S = \emptyset$ .

Otherwise, for all  $q' \in Q$ ,  $\text{QUD}(q') = \langle \dots q \rangle$  iff  $\text{Strat}(q') \in S$ .

(2012:18)

(340)  $\text{Strat}(a_i) = \langle a_i, \emptyset \rangle$

$\text{Strat}(a_{ii}) = \langle a_{ii}, \emptyset \rangle$

$\text{Strat}(a) = \langle a, \{ \langle a_i, \emptyset \rangle, \langle a_{ii}, \emptyset \rangle \} \rangle$

$\text{Strat}(b_i) = \langle b_i, \emptyset \rangle$

$\text{Strat}(b_{ii}) = \langle b_{ii}, \emptyset \rangle$

$\text{Strat}(b) = \langle b, \{ \langle b_i, \emptyset \rangle, \langle b_{ii}, \emptyset \rangle \} \rangle$

$\text{Strat}(1) = \langle 1, \{ \langle a, \{ \langle a_i, \emptyset \rangle, \langle a_{ii}, \emptyset \rangle \} \rangle, \langle b, \{ \langle b_i, \emptyset \rangle, \langle b_{ii}, \emptyset \rangle \} \rangle \} \rangle$

(2012:19)

Considering the question stack in (337) once again, interestingly, Danai does not provide answers to the subquestions individually. Nevertheless, his answer, which is in response to the superquestion, supplies answers to the subquestions listed above. The last subquestion is answered clearly by the gender adjective *male*, which indicates the gender of the cat. The two components in the answer *Siamese cat* offer answers to the remaining subquestions. A cat of this particular breed has short hair with a light brown colour body and chocolate points on its face, ears, legs, and tail. They have blue eyes. These details thus automatically describe other features of Thani's cat that correspond to the subquestions entailed by the

superquestion.

## 6.4 THE FORMATION OF DENIALS AND *LEE45*'S COUNTER-EXPECTATIONS THROUGH QUESTIONS

### 6.4.1 The formation of denials

In general, a denial represents a proposition that opposes the proposition available in the antecedent (Horn 1985, 1989; van der Sandt 1991, 1998; Geurts 1998; van der Sandt and Maier 2003). The rejection is thus not produced with a vague target of any element in the antecedent but at a specific element which is deemed false. As the targeted element receives focus, the information structure also influences the production and interpretation processes. An example is given in (341):

(341) Danai: Thani's cat is a [Persian]<sub>F</sub> cat.

Sunan: It is not a [Persian]<sub>F</sub> cat. It is a [Siamese]<sub>F</sub> cat.

The denial expressed above is targeted at the element *Persian* present in the antecedent uttered by Danai. Due to the typical mechanism of denial, both the antecedent and the sentence that counters it have *Persian* as their focused elements. Besides expressing a denial of Danai's utterance, Sunan gives the correct information concerning the breed of the cat. Hence in her second utterance, *Siamese* becomes the focus.

The formation of the denial made by Sunan can be explained through the formation of questions. Expressing an agreement or a disagreement is identical to answering a polar or yes/no question. A polar question, like an information question, is formed in accordance with common ground knowledge and context. Moreover, under the QUD, it serves as a move which is aimed by the speaker at opposing the antecedent. Examining (341) once again, the assertion present in Danai's utterance induces either Sunan's agreement or disagreement. Influenced by this set up move, the pay off move requires two verifications: the existence of the definite NP *Thani's cat*, which represents the issue under discussion, in the background knowledge and the type of the cat based on the background knowledge. These double verifications automatically lead to the question stack shown in (342). Note that while in reality questions a and b entail large sets of over two plausible alternatives, this question stack mentions only two plausible alternatives for each question.



- (342) 1. Is Thani's cat a Persian Cat?
- a. Does Thani have a cat?
    - i. Does Thani have a cat and a dog?  
Ans(a<sub>i</sub>) = Yes
    - ii. Does Thani have a cat and no dog?  
Ans(a<sub>ii</sub>) = Yes
    - iii. Does Thani have no cat and no dog?  
Ans(a<sub>iii</sub>) = No
  - b. What type of cat does Thani have?
    - i. Does Thani have a Persian cat?  
Ans(b<sub>i</sub>) = No
    - ii. Does Thani have a Siamese cat?  
Ans(b<sub>ii</sub>) = Yes

Sunan's reply suggests that the fact that Thani has a cat is the complete answer to question a. However, the result of the verification of information concerning the type of cat urged by the second question suggests a contrast between what is asserted and what exists in the background knowledge. The answers to questions a and b result in an expression of denial which determine the nature of the payoff move set up by Sunan. The goal of this payoff move is to urge Danai to correct his background knowledge concerning the type of Thani's cat by replacing it with the correct information that she offers.

The situation in (341) possibly proceeds in other ways, as shown in (343) and (344). The difference between the two directions is that in (343) the denial and the correct information are provided separately and in response to the overt questions, while in (344) the denial is not overtly expressed but is presumed through the statement that offers the correct information. The speaker expects an attempt by the addressee to acquire the correct information and that a further question will thus be asked. She does not wait until the question is made; instead, she provides the correct information right away.

- (343) Danai: Thani's cat is a Persian cat.  
 Sunan: It is not a Persian cat.  
 Danai: So what breed is it then?  
 Sunan: (It is a) Siamese.

(344) Danai: Thani's cat is a Persian cat.

Sunan: It is a Siamese cat.

Applying the rule of the congruence of a question and an answer, both the questions and the denial must induce the same set of alternatives. The information questions and the correct information involved in the process of denial expression stem from the polar question which represents the superquestion. The lack of congruence results with the unacceptability of the denial utterance and consequently a conversation crash. This is exemplified through (345):

(345) Danai: Thani's cat is a Persian cat.

Sunan: !It is not a Bulldog. It is a Golden Retriever.

The formation of denial in Thai through questions can be observed from a denial denoted by the particle *taan22haak22*, the production process of which involves the validation of the proposition in the antecedent and the inquiry for the correct information. The use of *taan22haak22* is exemplified in (346), in which the foci of both utterances fall on the numbers of cats:

(346) Danai: thaa33nii33 mii33 mæw33 [sii24dam33]<sub>F</sub>

Thani have cat black

'Thani has a black cat.'

Sunan: khaw24 mii33 [sii24khaw24]<sub>F</sub> taan22haak22

he have white PART

'He has a white one!'

In the case of *taan22haak22* the contrast between the two propositions derived from the contrast between the focused is caused by the fact that the assertion made in the antecedent is never valid. Therefore, unlike in the case of *læw45*, it does not indicate an expectation but a misunderstanding or a false judgement. Given such a nature of the antecedent, the formation of a denial expressed through *taan22haak22* involves only the questions that check the existence of the issue under discussion in the common ground and the validity of the assertion made in the antecedent.

Concerning coherence, the content of a denial made through *taan22haak22* is determined by common ground information and contexts, which can be accounted for via the mechanisms of questions and answers, as follows. Considering Danai's statement in (346) once again, the statement, following Rooth's concept of focus, is the answer to the question in (347), which brings about the variable that refers to numbers, as shown in (348) and the set of plausible alternatives that are defined by the remaining components of the question, as displayed in (349). These components depict the information in the common ground, that is, the existence of Thani's ownership of cats. The statement is made by Danai in the context in which he believes the proposition present in the statement is true and that this information should be added to the common ground.

(347) What is the colour of the cat that Thani has?

(348) Thani has an  $x$  cats.

(349) {black, brown, white, ginger,...}

The focus of the sentence uttered by Danai is thus on *black* which can be substituted for the variable. The acceptance and rejection of Danai's statement is possible only if Sunan accepts the question in (347) and agrees to find the answer to it. This question creates the question stack provided in (350):

- (350) 1. Is it the case that Thani has a black cat?
- a. What kind of pet does Thani own?
    - a<sub>i</sub>. Does Thani own a dog?  
Ans(a<sub>i</sub>) = No
    - a<sub>ii</sub>. Does Thani own a cat?  
Ans(a<sub>ii</sub>) = Yes
  - b. What is the colour of the cat that Thani has?
    - b<sub>i</sub>. Does Thani have a black cat?  
Ans(b<sub>i</sub>) = No
    - b<sub>ii</sub>. Does Thani have a white cat?  
Ans(b<sub>ii</sub>) = Yes

However, if Sunan does not share the information about Thani's ownership of cats she is likely to cast her doubt about it by asking (351), or if she is certain that Thani does not own any cat, she can object to it by using *taan22haak22*, as demonstrated in (352):

(351) Sunan: *thaa33nii3 mii33 mɛɛw33 duay rəə24*  
 Thani have cat also QW  
 'Does Thani have any cats at all?'

(352) Sunan: *thaa33nii3 may42 mii mɛɛw33 ləəy33 taan22haak22*  
 Thani NEG have cat at all PART  
 'Thani does not have any cats at all!'

The content of *taan22haak22*'s denial must correspond to the contents of the questions. Following this rule, such responses as (353) and (354) are considered unacceptable denials of Danai's statement in (346); they do not provide either a complete or a partial answer to (347).

(353) Sunan: *!thaa33nii3 pay33 phuu33ket22 taan22haak22*  
 Thani go Phuket PART  
 'Thani went to Phuket!'

(354) Sunan: *!thaa33nii33 dɯm22 chaa33 pay33 sɔɔŋ24 kɛɛw42 lɛɛw45*  
 Thani drink tea go two CLASS PART  
 'Thani has drunk two cups of tea!'

#### 6.4.2 The formation of *lɛɛw45*'s counter-expectations

In this section the two problems concerning coherence and focus identification will be tackled. Instead of depicting the operation of *lɛɛw45* solely from the semantic perspective, the investigations carried out in this chapter present the operation of the particle at the discourse level. The section is outlined in accordance with the two problems which concern the formation of coherence and the impact of the information structure on the production and interpretation of *lɛɛw45*'s counter-expectations. With the application of the QUD, the solutions to these problems will offer a clear picture of the operation of the particle at the discourse level and point out that the operation involves not only the

semantics of the particle but also some pragmatics factors.

#### THE OPERATION OF *lɛɛw45* AND THE IMPACTS OF CONTEXT AND COMMON GROUND

As proposed in Chapter 4, the meaning of *lɛɛw45* existing in present day Thai shows the combination of the particle's function as a marker of change of state knowledge and its function at the discourse level as the marker of counter-expectation. The dual role of the particle is described once again through the situation in (355):

(355) Context: Danai saw a beautiful vase at the pottery shop and wanted to buy it. However, he had to run to the rail station to catch the train to York. He then decided that he would come back to buy the vase in the afternoon. Now he is in the pottery shop but does not see the beautiful vase he wanted to buy. He then asked the shop assistant about it. Here is the dialogue between the two people:

Danai: cɛɛ33kan33 bay33 nan45 pay33 nay24 khrup45  
 vase CLASS DEM go where PART (POLITENESS-MAS.)  
 'Where is that vase?'  
 SA: mii33 khon33 maa33 sɯu45 pay33 lɛɛw45 kha22  
 have person come buy go PART PART (POLITENESS-FEM.)  
 'A person has bought it (previously it was available but now it is not).'

The utterance of the shop assistant above, which is marked by *lɛɛw45*, has two implications. The first implication is that, now the vase is not available as it has been bought by someone. This represents the current state of the vase being not available. The second implication lies in the presupposition triggered by *lɛɛw45*; that is, previously the vase was not in the state of being unavailable. In other words, the vase used to be available but now it is not as it has been bought by a person. As such, the current state which is present in the sentence in fact not only represents the current state of the vase at the time the sentence was uttered by the shop assistant; it also represents the new state of the item as opposed to its old state of being available as suggested in the presupposition.

Apart from the assertion concerning the new state and the presupposition concerning the old state, the utterance of the shop assistant is also aimed at informing Danai that the vase is no longer in the state he has in his mind; that is, the state of being

available. Before hearing the utterance of the shop assistant, Danai believed or expected that the vase was available for him to buy. The utterance of the shop assistant conveys two messages: that the state of the vase has been changed from being available to being unavailable, and that Danai's belief or expectation is no longer valid. The consequence is that Danai has to give up his intention to buy that vase or he probably has to find another one to buy.

The shop assistant can only talk about the current state of the vase and does not have to refer to its old state in the following situation:

(356) Context: Danai saw that the shop assistant was busy with a customer. He wants to know what happened.

Danai: mʉa42kii45    mii33    ʔa22ray33    rʉu24    khɾup45  
 a moment ago have what QW PART (POLITENESS-MAS.)  
 'What happened a moment ago?'

SA: mii33    khon33    maa33    suu45    cʉe33kan33    pay33    kha22  
 have person come buy vase go part (POLITENESS-FEM.)  
 'A person has bought the vase.'

As suggested by the context, Danai does not aim at asking the shop assistant about the vase. He only wants to ask about what was going on in the shop in general. The shop assistant does not detect any past belief of Danai about the vase and does not see any point why she needs to overtly refer to a change of state or to suggest to Danai that his past belief no longer holds. So, she does not use *lɛw45*.

Reconsidering the situation in (355), the vase, which is the issue under discussion, is definite and already exists in the common ground of Danai and the shop assistant. Even though it is not present in the shop at the time this dialogue takes place, referring to it by using the DP *classifier + demonstrative* suffices to attune the understanding of the two interlocutors that the vase at issue is the beautiful vase which once stood on the shelf in the shop.

Before continuing the discussion on the influence of context, the ambiguity concerning the definiteness of the NPs in Thai should be addressed here. A bare noun in Thai can be interpreted in many ways. Consider (357):

- (357) maa24 chɔɔp42 thɛɛ45 kra22duuk22  
 dog like chew bone
- (i) 'A dog (in general) likes to chew on bones.'  
 (ii) 'Dogs (in general) like to chew on bones.'  
 (iii) 'The dog likes to chew on bones.'  
 (iv) 'The dogs like to chew on bones.'

The different interpretations above suggest that the interpretation for the correct reference of the bare noun in Thai thus relies heavily on context. Both the speaker and the hearer must be aware of the context of the discussion. In the case above, for example, they must be aware if they are discussing canines in general or a specific canine.

Now let us get back to the issue of context and the operation of *lɛɛw45*. Consider a more complicated situation in (358):

- (358) Context: Danai knows that Sunan has a Siberian Husky puppy and she loves it very much. One day the puppy found a broken part of the fence and sneaked away from the house through it. Sunan did not see her puppy and even though she searched every spot in the house she did not find it. She was in shock and very sad. She called Danai to tell him about this tragedy.

Sunan: luuk42maa24 haay24 pay33 lɛɛw45  
 puppy disappear go PART  
 'The puppy disappeared (previously it was in the house).'

The interpretation for *luuk42maa24* 'puppy' relies on the context. In the context in (358) both Danai and Sunan mutually acknowledge the existence of Sunan's puppy in their common ground. Therefore, despite the fact that *luuk42maa24* in Sunan's utterance is unmarked, both Sunan and Danai recognise that it refers to Sunan's puppy. This phenomenon is bidirectional in the sense that Sunan assumes that uttering the bare noun *luuk42maa24* suffices to hint to Danai that she is going to talk about her puppy, not other puppies. Danai recognises Sunan's purpose of using the bare noun *luuk42maa24*. He assumes that she uses it in order to refer to her puppy. Otherwise, she would have used some modifiers to guide him to the puppy she really wants to talk about.

Another crucial issue which extends from the issue about definiteness is the requirement for the existence of the issue under discussion in the common ground. *lɛɛw45* requires that the issue be definite and already exist in the common ground. This requirement is in line with the normal mechanism of counter-expectation, which demands the existence of the issue under discussion and the expectation about it. Owing to this requirement, *lɛɛw45* does not co-occur with a thematic sentence as shown in (359).

(359) Context: Danai is organising a concert for Thai traditional music. Normally young people are not fond of this kind of music. Sunan is aware of this fact.

Sunan: kəət22 ʔa22ray33 khun42  
 happen what up  
 ‘What happened?’

Danai: way33run42 maa33 fan33 kən33səət22 laay24 khon33  
 teenager come listen concert many CLASS  
 ləəy33/\*lɛɛw45  
 PART PART  
 ‘Lots of teenagers attended the concert!’

Also, *lɛɛw45* is not allowed in a sentence that has an indefinite NP as the subject. This is demonstrated in (360):

(360) (mii33) chaay33 khon33 nuŋ22 haay24 pay33/\*lɛɛw45  
 (have) man CLASS one miss go PART  
 ‘There is a man who is missing.’

In the above situation, the subject—the indefinite *man*—is a new entity which has never been introduced to the common ground. Therefore, there is no established proposition that *lɛɛw45* can take and a counter-expectation is not possible. What the sentence asserts is thus only a factive report.

Moreover, the subject in a sentence marked with *lɛɛw45* is always definite and acts as the issue under discussion. On the other hand, the subject in an unmarked alternative is not restricted to a definite NP. Compare (361) with (362):



(361) maa45 wiŋ42 day42 lɛɛw45  
 horse run can PART

‘The horse can run now (previously this horse was not believed to be able to run).’

(362) maa45 wiŋ42 day42  
 horse run can

‘The horse/A horse/Horses (in general) can run.’

In (361), the subject is a definite horse that previously was not expected to be able to run. *Lɛɛw45* triggers this implication, taking the proposition in which this unique horse acts as the issue under discussion. Then it yields a denial against the presupposition while at the same time offering the correct fact about the horse at issue. In (362), in contrast, the subject horse can be interpreted either as definite or indefinite. Thus a generic reading can also be derived in the case of an indefinite interpretation.

THE FORMATION AND THE COHERENCE OF THE COUNTER-EXPECTATIONS GENERATED BY  
*Lɛɛw45*

*Lɛɛw45*'s counter-expectations can be formed through the QUD. Consider (363):

(363) Danai: thaa33nii33 mii33 tɛɛ22 mɛɛw33 pəə33sia33  
 Thani have only cat Persia

'Thani only has a Persian cat.'

Sunan: tɛɛ22 təən33nii45 khaw24 mii33 mɛɛw33 thay33 duay42 lɛɛw45  
 but now he have cat Siamese also PART

'But now he also has a Siamese cat.'

The statement made by Danai welcomes both an acceptance and a rejection. It just reflects the belief of Danai, which says that in his world Thani has two cats. As for Sunan, her reaction to Danai's statement is contingent on her background knowledge concerning the issue. The statement made by Danai provides the setup move for Sunan; that is, either to agree or disagree. Thus, Sunan is supposed to answer the question *'Is it the case that Thani has two cats?'*, which forms her payoff move. Like the production of a denial that has been discussed earlier, the process of counter-expectation production prompts the verification of

the existential presupposition of the issue under discussion in the background knowledge. This is conducted through questions in (364) and (365):

(364) Does Thani have a cat?

(365) What breeds of cat does Thani currently own?

In the case of *lεεw45*, however, the counter-expectation is not made at this stage when the contrast between the two pieces of information from the two different propositions is recognised. The reason is that, *lεεw45* prompts the detection of a contrast between the previous expectation and the asserted proposition. This is achieved through the questions in (366) and (367):

(366) How many cats did Thani previously own?

(367) What is the relation between the breeds of cat that Thani currently owns and the breeds of cats he previously owned?

The complete stack of questions and answers are compiled in (368), which leads to the strategy to answer 1 given in (369):

(368) 1. Is it the case that Thani only has a Persian cat?

a. Does Thani have a cat?

i. Does Thani have a cat and a dog?

Ans(a<sub>i</sub>) = Yes

ii. Does Thani have a cat and no dog?

Ans(a<sub>ii</sub>) = Yes

iii. Does Thani have no cat and no dog?

Ans(a<sub>iii</sub>) = No

b. What breeds of cat does Thani currently own?

b<sub>i</sub>. Does Thani only own a Persian cat?

Ans(b<sub>i</sub>) = No

b<sub>ii</sub>. Does Thani only own a Siamese cat?

Ans(b<sub>ii</sub>) = No

b<sub>iii</sub>. Does Thani own both a Persian cat and a Siamese cat?

Ans(b<sub>ii</sub>) = Yes

c. What breeds of cat did Thani previously own?

c<sub>i</sub>. Did Thani only own a Persian cat?

Ans(c<sub>i</sub>) = Yes

c<sub>ii</sub>. Did Thani only own a Siamese cat?

Ans(c<sub>ii</sub>) = No

c<sub>iii</sub>. Did Thani own both a Persian cat and a Siamese cat?

Ans(c<sub>ii</sub>) = No

d. What is the relation between the breeds of cat that Thani currently owns and the breeds of cat that he previously owned?

d<sub>i</sub>. Does the latter agree with the former?

Ans(d<sub>i</sub>) = No

d<sub>ii</sub>. Does the latter contrast with the former?

Ans(d<sub>ii</sub>) = Yes

(369) Strat(1) = <1, {<a, {<a<sub>i</sub>, ∅>, <a<sub>ii</sub>, ∅>}>, <b, {<b<sub>i</sub>, ∅>, <b<sub>ii</sub>, ∅>}>, <c, {<c<sub>i</sub>, ∅>, <c<sub>ii</sub>, ∅>}>, <d, {<d<sub>i</sub>, ∅>, <d<sub>ii</sub>, ∅>}>}>

The answers to questions b and c indicate that Danai's statement in fact was true before the reference time and is false at the reference time, which is NOW. They urge Sunan to find the answer to d. As the answer suggests that the asserted proposition displayed in the answer to b contrasts with the previous expectation represented in the answer to c, *leew45* is used as part of Sunan's payoff move, which is supposed to signal a counter-expectation.

## 6.5 THE APPLICATION OF THE QUD TO SOLVING THE PROBLEM CONCERNING COHERENCE

As discussed previously, the use and interpretation of *leew45* rely hugely on context and common ground. In this section, brief information on the production and interpretation of *leew45*'s counter-expectations will be provided. Mainly, it will show how the issue under discussion is mapped with the relevant knowledge in the common ground and how the context controls the mapping.

Let us turn to the problem concerning coherence, which is restated in (370) below. Suppose this conversation takes place in the context in which the interlocutors discuss what Danai usually does when he has a migraine headache.

(370) A: thuk45khrəŋ45 da33nəy33 ca22 kin33 yaa33paa33raa33  
 every time Danai FUT eat paracetamol  
 'Every time, Danai takes paracetamol.'

B: #khrəŋ45nii45 khaw24 kin33 yaa33paa33raa33 taam33 thii42  
 This time he eat paracetamol follow COMP  
 mɔɔ24 saŋ22 lɛɛw45  
 doctor order PART  
 #'This time he took paracetamols as prescribed by the doctor.'

The statement in (370A), based on the context, is the answer to the question in (371), which prompts the establishment of the q-alternative set in (372).

(371) thuk45khrəŋ45 da33nəy33 tham33 yaŋ33ŋay33  
 every time Danai do how  
 'What does Danai do every time?'

(372) {having some rest, taking painkillers, seeing a doctor, ...}

The statement represents A's expectation while at the same time establishing A's setup move to ask either for an agreement or a disagreement. In both the cases of acceptance and objection, the superquestion leads to relevant subquestions. In accordance with the previous expectation, these questions comprise a question stack, as shown in (373). Note that the answer to d does not have any effect on the problematic issue being encountered in this section.

(373) 1. Is it the case that Danai takes paracetamols?  
 a. What kind of pain killer does Danai usually uses to treat migraine?  
 a<sub>i</sub>. Does Danai usually take aspirin?  
 Ans(a<sub>i</sub>) = No

- a<sub>ii</sub>. Does Danai usually take paracetamol?  
 Ans(a<sub>ii</sub>) = Yes
- b. What does Danai do every time he has a migraine?  
 b<sub>i</sub>. Does Danai take paracetamol every time?  
 Ans(b<sub>i</sub>) = Yes  
 b<sub>ii</sub>. Does Danai see the doctor every time?  
 Ans(b<sub>ii</sub>) = No
- c. What did Danai do this time?  
 c<sub>i</sub>. Did Danai take paracetamols this time?  
 Ans(c<sub>i</sub>) = No  
 c<sub>ii</sub>. Did Danai see the doctor this time?  
 Ans(c<sub>ii</sub>) = Yes
- d. What is the relation between what Danai does every time and what he did this time?  
 d<sub>i</sub>. Does the latter agree with the former?  
 Ans(d<sub>i</sub>) = No  
 d<sub>ii</sub>. Does the latter contrast with the former?  
 Ans(d<sub>ii</sub>) = Yes

The question stack above indicates that both the acceptance and rejection of A's statement must be coherent with the issue under discussion and that the complete answers to the subquestions provide a complete answer to the superquestion.

Returning to the reply in (370B), it is possibly the answer to the question in (374) which results in the set of q-alternatives in (375).

(374) khraŋ45nii45 da33naay33 kin33 yaa33paa33raa33 taam33 thii42  
 This time Danai eat paracetamol follow COMP  
 mɔɔ24 saŋ22 may45  
 doctor order PART  
 'Did Danai take paracetamols as prescribed by the doctor this time?

(375) {Danai took paracetamols as prescribed by the doctor, Danai did not take paracetamols as prescribed by the doctor}

The question and the set of q-alternatives above apparently do not correspond to the question or the set of q-alternatives formed from (370A). Therefore, (370B) is considered an unacceptable counter-expectation against (370A). It is instead compatible with the statement in (376), which induces the same set of q-alternatives.

(376) thuk45khranꠞ45 da33naay33 may42day42 kin33 yaa33paa33raa33  
 every time Danai neg eat paracetamol  
 taam33 thii42 mɔɔ24 sanꠞ22  
 follow COMP doctor order  
 'Every time Danai does not take paracetamols as prescribed by the doctor.'

To summarise, the content of the counter-expectation in the case of *lɛɛw45* must be coherent with the content of the antecedent. With the application of the QUD, coherence in this case is recognised only if both the antecedent and the counter-expectation refer to the same issue and the same set of q-alternatives.

## 6.6 *Lɛɛw45* AND THE INFLUENCE OF FOCUS

This section revisits the last problematic case of *lɛɛw45*, which mainly concerns the interpretation process carried out by the addressee. (377) revives the tangles that have been pointed out earlier. Both (377Bi) and (377Bii) are acceptable responses to (377A).

(377) A: da33nay33 day42 rian24thɔɔꠞ33 way42naam45 lɛɛw45  
 Danai get gold medal swimming PART  
 Danai has won a gold medal in swimming!  
 B: i) rian24thɔɔꠞ33!  
 gold medal  
 Gold medal!  
 ii) da33naay33 ʔa22na45  
 Danai QW  
 'Danai?!'

The core issue of the above puzzling case lies in the cause of the two different interpretations that lead to two different responses to the same counter-expectation. This

section proposes that the variety of interpretations for the same counter-expectation is a result of the association of *lɛɛw45* with different foci. Moreover, the different focalisations reflect the different sets of common ground knowledge that the participants of the two situations attain and the individual contexts that they set themselves in. The investigations make use of the QUD in the identification of the focus, which is supposed to interact with the particle in order that successful production and interpretation processes be accomplished.

### 6.6.1 The association of *lɛɛw45* with focus

Section 6.1.3 has addressed the association between focus and focus-sensitive particles, which yields truth-conditional effects. Through the operation of *only* it has been shown that the association of the particle with different foci leads to different truth conditions. This has also been proposed in several studies, such as those of Beaver and Clark (2003) and Kratzer (2004).

The same phenomenon also occurs in the case of *lɛɛw45*, as (378), (379) and (380) reveals:

- (378) Context: Last week Danai told Thani and Sunan that he would travel to Chiangmai. However, he changed his mind and will travel to Phuket instead. Thani has learned about Danai's new plan and then wants to share it with Sunan.

da33naay33 naŋ42 rot45fay33 pay33 [phuu33ket22]<sub>F</sub> lɛɛw45

Danai sit train go Phuket PART

'Danai has taken a train to Phuket (previously it was believed that he would travel to Chiangmai)!'

- (379) Context: Sunan was told by Thani that Thida would travel to Phuket. However, Thida could not make it and so she sold the train ticket to Danai. So, it is Danai, not Thida, who is going to travel to Phuket. Thani informs Sunan about this news.

[da33naay33]<sub>F</sub> ca22 naŋ42 rot45fay33 pay33 phuu33ket22 lɛɛw45

Danai FUT sit train go Phuket PART

'Danai (not Thida as expected/believed previously) is going take the train to Phuket!'

- (380) Context: Danai told Thani and Sunan that he would take a flight to Phuket and asked them to help him with his luggage and transportation to the domestic airport. However, he changed his mind and will take a train instead in order to save his money. Thani has learned about Danai's final decision but Sunan has not.

da33naay33 ca22 [naŋ42 rot45fay33]<sub>F</sub> pay33 phuu33ket22 lɛɛw45

Danai FUT sit train go Phuket PART

'Danai is going to take a train (not a flight as previously expected/believed) to Phuket!'

It can be seen in all of the three examples that even though *lɛɛw45* appears in the same position of the sentence, the post-VP position, it imposes its semantic effects not only on the whole VP but on any elements in the sentence that receive focus.

As the examples reveal, the focalisation of the focus relies tremendously on contexts. Normally, in Thai, focus marking is not obligatory, as in many other languages where focus marking is performed via phonological and morphological devices. Therefore, then interpretation of a sentence can be very tricky and demands the presence of context.

As focus identification relies heavily on context, and when interpreting *lɛɛw45*'s counter-expectations the addressees must engage with the same contexts as the speakers. This is quite crucial in the cases in which *lɛɛw45*'s counter-expectations are expressed out of the blue. The interpretations of *lɛɛw45*'s counter-expectations in such cases are more complicated than in the cases in which the antecedents are explicitly made in the discourse by the addressee. An example is given in (381):



(381) Danai: thaa33nii33 sɯɯ45 rot45 may22 hay42 luuk42chaay33

Thani buy car new give son

lɛɛw45 na45

PART PART

‘Thani bought a new car for his son (previously he was expected to buy it for his daughter).’

Sunan: luuk42saw24 sia24cay33 yɛɛ42 ləy33

Daughter be sad very PART

‘The daughter must be very sad.’

Danai: chan24 kɔɔ42 khit45 yaan22nan45

I also think so

‘I think so, too.’

In the above case, the common ground information is not overtly reintroduced while both the speaker’s expression and the hearer’s interpretation rely heavily on it. Danai’s second utterance shows that both he and Sunan share common ground information about the expectation that Thani would buy a new car for his daughter. In this case, *lɛɛw45* is associated with the indirect object *son* and induces the set of alternatives that contains the persons that Thani possibly bought the new car for. Conversely, the lack of mutually shared background information or wrong focus identification potentially obstructs the conversation, as accommodation is needed.

Unlike (381), (382) indicates that the common ground information can be retrieved easily, as it is properly reintroduced at the beginning of the conversation; the context is set up right away. Owing to these advantages, both interlocutors recognise the foci easily and the production and interpretation of *lɛɛw45*’s counter-expectation are carried out smoothly.

(382) Danai: cam33 naa33li45kaa33 boo33raan33 khɔɔŋ24 thaa33nii33

remember clock old of Thani

day42may45

QW

‘Do you remember Thani’s antique clock?’

Sunan: cam33      day42    tham33may33    rəə24  
 remember    MOD    why                    QW  
 ‘Yes, I do. Why?’

Danai: thaa33nii33    khaay24    man33    pay33    læw45    la22  
 Thani            sell            it            go            PART      PART  
 ‘Thani has sold it.’

### 6.6.2 The application of the QUD dealing with the association of læw45 with focus

In order to tackle the problematic case in (377), it is necessary to re-examine (377A). The statement itself can be interpreted in various ways. This is due to the fact that the focus is not clearly identified and it can fall on any element that is eligible to receive it. According to what the sentence asserts, the proposition concerns a person called Danai, his action of swimming and the level of his performance. All of these issues can be the core issue that the speaker assigns a focus to. The fixed location of læw45 does not provide any clue about the location of the focus, as intended by the speaker. Suppose there are two possible contexts that are compatible with the semantics of læw45 and in which (377Bi) and (377Bii) are felicitous, as given in (383):

- (383) (i)      Danai normally wins either a silver or a bronze medal.  
 (ii)      Thani and Sutha normally win a gold medal.

The above contexts suggest different foci and thus lead to different variables, as shown in (384):

- (384) (i)      For the context in (383i):  
                   Danai wins **either a silver or a bronze medal**.  
                   Danai wins **x** medal.  
 (ii)      For the context in (383ii):  
                   **Thani and Sutha** win a gold medal.  
                   **x** wins a gold medal.

The interpretation processes of læw45's counter-expectations under the two contexts above are carried out as follows. The context in (383i) hints that in the common ground that both

interlocutors share there exists information about the prize that Danai was expected win. Moreover, it induces the set under expectation, which represents the prize that Danai was expected to win as given in (385) and the set that counters the expectation as given in (386):

(385) {silver medal, bronze medal}

(386) {gold medal}

Obtaining the new knowledge that this time Danai has won the gold medal, with the assistance of the common ground, the speaker of (377A) is encouraged to assign a focus to the prize that Danai has won. Her payoff move is thus to offer an agreement or a disagreement to the antecedent covertly formed by the common ground knowledge, checking for the relation between the prize Danai was expected to win and the prize he has won this time. This goal is accomplished with the assistance of the question stack in (387) which both verifies the expectation and inquires about the prize that Danai has won this time.

(387) 1. Is it the case that Danai normally wins either a silver or a bronze medal?

a. What is Danai's normal performance in swimming?

a<sub>i</sub>. Does Danai normally win a medal?

Ans(a<sub>i</sub>) = Yes

a<sub>ii</sub>. Does Danai normally win nothing?

Ans(a<sub>ii</sub>) = No

b. What prize does Danai normally win?

b<sub>i</sub>. Does Danai normally win a silver medal?

Ans(b<sub>i</sub>) = Yes

b<sub>ii</sub>. Does Danai normally win a bronze medal?

Ans(b<sub>ii</sub>) = Yes

b<sub>iii</sub>. Does Danai normally win a gold medal?

Ans(b<sub>iii</sub>) = No

c. What prize has Danai won this time?

c<sub>i</sub>. Has Danai won a silver medal?

Ans(c<sub>i</sub>) = No

c<sub>ii</sub>. Has Danai won a bronze medal?

Ans(b<sub>ii</sub>) = No

c<sub>ii</sub>. Has Danai won a gold medal?

Ans(b<sub>ii</sub>) = Yes

d. What is the relation between the prize that Danai normally wins and the prize that he has won this time?

d<sub>i</sub>. Does the latter agree with the former?

Ans(d<sub>i</sub>) = No

d<sub>ii</sub>. Does the latter contrast with the former?

Ans(d<sub>ii</sub>) = Yes

The new knowledge which informs that Danai has won the gold medal provides answers to the superquestion. Danai has not won either a silver or a bronze medal this time. The answer *gold medal* to the question in c is then compared with the answer to b. The answer to d suggests a contrast which motivates the speaker to express a counter-expectation, and *leew45* is thus used.

The common ground information concerning the prize that Danai normally wins also facilitates the interpretation of the counter-expectation. It also directs the addressee to the same question stack in (387) and enables the addressee to identify the focus in (377A). At this stage she realises that the prize or *gold medal* is associated with *leew45* which, suggests that it contrasts with the prize existing in the expectation in the common ground and that it causes a counter-expectation. As (377Bi) shows, the addressee also holds the same expectation and thus that Danai has won the gold medal this time also counters her expectation. Therefore, she expresses her surprise.

Regarding the context in (383ii), both interlocutors share information about the people that normally win a gold medal and that do not in their common ground. They acknowledge that Thani and Sutha normally win a gold medal while Danai and Weera normally win either a silver or a gold medal. Both of the interlocutors, or at least one of them, hold the belief or expectation that only Thani and Sutha, not Danai and Weera, will win a gold medal. According to the common ground information, the people involved can be divided into two sets; namely, the set of the people who normally win a gold medal, as shown in (388), and the set of the people that normally win either a silver or a bronze medal, as shown in (389). The former represents the set under expectation while the latter represents the set countering expectation.

(388) {Thani, Sutha}

(389) {Danai, Weera}

Suppose these four people are at the same swimming competition, the counter-expectation expressed in (377A) is thus bound to the question stack in (390):

(390) 1. Is it the case that Danai normally wins a gold medal?

a. What is Danai's normal performance in swimming?

a<sub>i</sub>. Does Danai normally win a medal?

Ans(a<sub>i</sub>) = Yes

a<sub>ii</sub>. Does Danai normally win nothing?

Ans(a<sub>ii</sub>) = No

b. Who normally wins a gold medal?

b<sub>i</sub>. Does Thani normally win a gold medal?

Ans(b<sub>i</sub>) = Yes

b<sub>ii</sub>. Does Danai normally win a gold medal?

Ans(b<sub>ii</sub>) = No

c. Who has won the gold medal this time?

c<sub>i</sub>. Has Thani won the gold medal this time?

Ans(c<sub>i</sub>) = No

c<sub>ii</sub>. Has Danai won the gold medal this time?

Ans(c<sub>ii</sub>) = Yes

d. What is the relation between the person that normally wins a gold medal and the person that won the gold medal this time?

d<sub>i</sub>. Does the latter agree with the former?

Ans(d<sub>i</sub>) = No

d<sub>ii</sub>. Does the latter contrast with the former?

Ans(d<sub>ii</sub>) = Yes

According to the common ground information, Danai is not a member of the set under expectation but of the set countering the expectation. Therefore, the new information which says that Danai has won the gold medal opposes the common ground information. That Danai is not the person that normally wins a gold medal, though it was valid

previously, is no longer invalid. *lɛɛw45* is thus added to the sentence in order to denote this contrast.

As for the addressee, who also shares the common ground information, the counter-expectation expressed by the speaker urges her first to identify the focus. She is able to do so with the help of the common ground and context. Realising that *lɛɛw45* in this sentence is associated with the focused subject *Danai*, she successfully derives the correct interpretation that it is *Danai* that has won the gold medal, not *Thani* and *Sutha*, as she previously expected. Surprised with the new information, she uttered (377Bii). Besides the counter-expectation, the new information about the state, that is, that it is *Danai* who has won the gold medal this time, is added to the common ground.

To summarise what has been discussed in this section, coherence is also a crucial requirement for *lɛɛw45*'s counter-expectations. Both the proposition that depicts the expectation and the proposition that counters it must be established based on the same common ground. The meanings of *lɛɛw45*'s counter-expectations are conveyed and comprehended via the association of *lɛɛw45* with the focus in its scope. Both coherence and focus identification can be accounted for by applying the QUD technique.

## 6.7 CONCLUSION

Generally, *lɛɛw45*'s counter-expectation is expressed by the speaker with a conversational goal to oppose the previous expectation regarding the issue under discussion. It asserts that the expectation is no longer valid, as it is countered by the asserted proposition. Besides this basic generation of meaning, coherence between the proposition containing the expectation and the proposition that counters it is also vital. Such coherence is controlled by the tripartite interaction of focus, common ground, and context. Moreover, the production and interpretation of a counter-expectation generated by *lɛɛw45* are dependent upon the association of *lɛɛw45* with the focus. Due to the fact that focus identification in Thai, a language which does not require overt focus marking, is complicated, Roberts' (1996, 2012) QUD technique was applied. Basically, the formation of *lɛɛw45*'s counter-expectations is guided by the QUDs, which represent the common ground information while at the same time calling for the set of q-alternatives or plausible answers which correspond to the common ground information and context from which the focused element is selected. The two propositions are coherent under the conditions that both of them lead to the same QUDs and the sets that contain the alternatives of the same type. The

QUD mechanism also shows how *leew45*, a focus sensitive particle, is associated with different elements which leads to a variation in interpretation. Overall, the QUD helps point out that *leew45*'s counter-expectation involves the speaker's set-up move and the hearer's pay-off move which impedes the conversation and that the mismatch of these two conversational moves impedes the conversation.

## Chapter 7

### Conclusion and Future Directions

This study has investigated some of the controversial issues concerning the role of *leew45*. It has pointed out that the conventional claim that *leew45* serves as a marker of perfective aspect does not suffice to account for the existence of *leew45* in a sentence. This treatment of *leew45* has been proved to be inefficient in accounting for the appearance of *leew45* in all patterns of aspectual combinations and in all types of predicates. The current study offers another treatment for *leew45*, which diverts from both the tense-based and aspect-based approaches and instead, pinpoints the role of the particle at the discourse level.

#### 7.1 WHAT IS ACTUALLY THE ROLE OF *LEEW45*?

Based on the analyses on the empirical data, the current study has proposed that *leew45* plays a primary role in a discourse as the marker of counter-expectation. A counter-expectation is the result of the contrast between the expectation proposition, and the asserted proposition which suggests that the expectation is no longer invalid. This claim regarding the primary role of *leew45* has been proved by the different uses of the alternative marked with *leew45* and the zero-marked alternative. The former is used when the expectation exists, while the latter is preferred in the case in which the expectation is absent. This major claim is supported by the empirical data which, as shown in Chapter 4, exhibits the use of both alternatives in natural language.

##### 7.1.1 A thorough look at the expectation implication

The study further investigated the implications of *leew45*; namely, the definiteness of the subject and the previous expectation with the implementation of the presupposition tests, that is, Leveinson's (1983) presupposition tests, Geurts' (1999) Presupposition Test Battery and Tonhauser et al.'s (2013) projection tests. The results revealed that though the definiteness of the subject behaves in the same manner as standard presuppositions, the implicated expectation does not always project. The results suggest that although *leew45* imposes a Strong Contextual Felicity constraint, it is in fact not really bound to Obligatory Local Effect. This is supported by the cases in which the attitude bearer mistakenly assumes that the context entails the expectation.



### 7.1.2 The operation of *lɛɛw45* at the discourse level

In addition to the exploration on *lɛɛw45*'s meaning and role at the semantic level, this study also showed how the particle behaves at the discourse level where common ground, context, and information structure come into play. It, first of all, proposes that the operation of *lɛɛw45* also involves the association of it with focus. The non-obligatory nature of focus marking in Thai allows for various plausible interpretations. Basically, the particular counter-expectation that the speaker intends to convey to the hearer restricts the hearer to a particular interpretation that leads to it. The pursuit of the correct interpretation depends on the identification of the focused element that interacts with *lɛɛw45*, which corresponds to the common ground knowledge and the context. In order to explain how focus is related to common ground and context and how it is identified, the current study applied the QUD technique. The stack of questions for a particular situation was set in accordance with the common ground knowledge shared by the participants of the conversation and in accordance with the suitable context. Both the polar and information questions in the stack were formed with the restrictions from the semantics of *lɛɛw45*; the polar questions checked for the validity of the previous expectation about the subject while the information question was aimed at seeking information that reflected the current status of the subject. The compatibility between *lɛɛw45* and the focus or the chosen alternative derived from the information question were bound to the conditions established under the semantics of *lɛɛw45*. Focus identification in the case of *lɛɛw45* was controlled by certain pragmatic factors and was beyond systematic prediction.

## 7.2 FUTURE RESEARCH DIRECTIONS

None of the findings and claims provided in the current study marks the end of the investigation. They still leave room for issues that have not been fully explored and require further research. The first issue concerns the acceptability of *lɛɛw45* in the cases of numbers, temporal sequences, and degree comparison in which there is interaction between the standard degree and comparative degree. It would be interesting to examine if the entailment of the standard degree prevailing also accounts for the acceptability of *lɛɛw45*. In addition, the influence of scale direction is worth investigating. If the direction of the scale where the entity is located also influences the use of the particle, perhaps the nature of the resulting state needs to be clearly defined. In relation to this issue, another

puzzling issue that might become an interesting research topic is the compositionality of the sentence that depicts a change of state. As seen from the comparative counter-expectations generated by *leew45*, the particle is fine in the case of degree comparison, regardless of the direction in which the comparison proceeds on the scale. The sentences that exhibit this phenomenon possibly share the same compositional features as those that denote counter-expectation from numbers and temporal sequences.

The second unexplored issue concerns effective models that are able to provide accurate predictions of both the speaker's expression and the hearer's interpretation of a sentence or utterance. Despite the fact that these two communicative processes can be explained at the semantic level through the semantic properties of the components primarily involved, they are quite flexible and perhaps unpredictable when the pragmatic factors from the common ground, context, and information structure are seen to play roles at the discourse level. Focus marking, no matter how it is carried out, enables both the speaker and the hearer to systematically and accurately retrieve common ground knowledge and reach the mutually agreed context. Nevertheless, in the case of languages which do not strictly require overt focus marking, it is still difficult to explain these communicative activities via question stacks due to certain pragmatic factors. Therefore, it would be worthwhile carrying out an in-depth study that would integrate these pragmatic factors into question formation. This would potentially lead to a linguistic model that accounted both for the operations of *leew45* and other discourse particles.

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