

# ASPECTUAL PROPERTIES AND POLARITY- SENSITIVITY OF COPULAS *pen*<sub>1</sub> AND *khuu*<sub>1</sub> IN THAI<sup>1</sup>

Boonjeera Chiravate<sup>2</sup>

## Abstract

*'Pen*<sub>1</sub>*' and 'khuu*<sub>1</sub>*' in Thai have traditionally been regarded as copular verbs comparable to 'be' in English. Appearing in a copulative sentence, the two Thai copula verbs, however, differ in polarity-sensitivity. The present study demonstrates that the difference in polarity-sensitivity of the two Thai copulas cannot be accounted for within the theory of polarity-sensitive items previously proposed. Investigating the aspectual properties of the two Thai copulas in comparison with those of English copula, this study suggests that an explanation for the difference in polarity-sensitivity of the two Thai copulas might involve their aspectual properties. Contributing to the study of aspect and polarity-sensitivity, the present study reveals differences between Thai and English copulas and provides additional support for the idea that the macro-category of so-called copular verbs is*

<sup>1</sup> This article has been developed from a thesis entitled *Polarity Sensitive Copular Verbs in Thai* by Boonjeera Chiravate, submitted to Michigan State University in partial fulfillment of the requirements for the degree of Master of Arts in 1999.

<sup>2</sup> Assistant Professor, Department of English, Faculty of Arts, Silpakorn University

*too vague to describe cross-linguistic variation.*

## 1. Introduction

Copulas are considered to be fundamental in any language. In Thai, there are two copulas: *pen*<sub>1</sub> and *khuu*<sub>1</sub><sup>3</sup>. In addition to difference in their interpretation, the two copulas differ in their restrictions concerning the polarities of the environment in which they occur. The copula *pen*<sub>1</sub> can occur in both positive and negative environments whereas the copula *khuu*<sub>1</sub> can only occur in a positive environment, as illustrated in (1) to (2).

<sup>3</sup> In this article, data from Thai is transcribed based on the following transcription system.

Consonants:

<i>p</i>	<i>t</i>	<i>c</i>	<i>k</i>	<i>ʔ</i>
<i>ph</i>	<i>th</i>	<i>ch</i>	<i>kh</i>	
<i>b</i>	<i>d</i>			
<i>f</i>	<i>s</i>	<i>h</i>		
<i>m</i>	<i>n</i>		<i>ŋ</i>	
	<i>l</i>	<i>r</i>		
<i>w</i>		<i>y</i>		

Vowels:

<i>i</i>	<i>ii</i>	<i>ɯ</i>	<i>ɯɯ</i>	<i>u</i>	<i>uu</i>
<i>e</i>	<i>ee</i>	<i>ə</i>	<i>əə</i>	<i>o</i>	<i>oo</i>
<i>ɛ</i>	<i>ɛɛ</i>	<i>a</i>	<i>aa</i>	<i>ɔ</i>	<i>ɔɔ</i>

Diphthongs:

<i>ia</i>	<i>ɯa</i>	<i>ua</i>
-----------	-----------	-----------

Tones:

- <sub>1</sub> stands for a mid tone.
- <sub>2</sub> stands for a low tone.
- <sub>3</sub> stands for a falling tone.
- <sub>4</sub> stands for a high tone.
- <sub>5</sub> stands for a rising tone.

- (1) a. *som<sub>5</sub>sak<sub>2</sub> pen<sub>1</sub> sa<sub>2</sub>thaa<sub>5</sub>pa<sub>2</sub>nik<sub>4</sub>*

Somsak COP<sup>4</sup> architect  
“Somsak is an architect.”

- b. *som<sub>5</sub>sak<sub>2</sub> may<sub>3</sub> day<sub>3</sub> pen<sub>1</sub>*  
Somsak NEG<sup>5</sup> COP  
*sa<sub>2</sub>thaa<sub>5</sub>pa<sub>2</sub>nik<sub>4</sub>*

architect  
“Somsak is not an architect.”

- (2) a. *som<sub>5</sub>sak<sub>2</sub> khuu<sub>1</sub> sa<sub>2</sub>thaa<sub>5</sub>pa<sub>2</sub>nik<sub>4</sub>*

Somsak COP architect  
“Somsak is an architect.”

- b. *\*som<sub>5</sub>sak<sub>2</sub> may<sub>3</sub> day<sub>3</sub> khuu<sub>1</sub>*  
Somsak NEG COP  
*sa<sub>2</sub>thaa<sub>5</sub>pa<sub>2</sub>nik<sub>4</sub>*

architect  
“Somsak is not an architect.”

Although the fact that the two copulas differ in polarity-sensitivity has been noted in several earlier studies on Thai grammar, none of the studies has attempted to explain why the two copulas differ. The present study, by investigating the aspectual properties of the two copulas, suggests that an explanation for the difference in polarity-sensitivity between the two copulas might involve their aspectual properties.

The remainder of this article consists of 4 sections. Section 2 encompasses general facts about Thai copulas and discusses how the copulas *khuu<sub>1</sub>* and *pen<sub>1</sub>* can be viewed as a polarity-sensitive item (henceforth, referred to as PSI) and a polarity-insensitive item (henceforth, referred to as PII),

respectively. Section 3 demonstrates that the polarity-sensitive copula *khuu<sub>1</sub>* strikingly differ from PSIs in English and that the difference between *khuu<sub>1</sub>* and *pen<sub>1</sub>* does not involve those semantic properties claimed to distinguish PSIs from PII in English<sup>6</sup>. Section 4 examines aspectual properties of the two Thai copulas in comparison with those of the English copula. In section 5, a possible direction in which the aspectual properties and polarity-sensitivity might be related is pointed out. Finally, section 6 concludes the article.

## 2. General facts about Thai copulas

### 2.1 Meaning

*Pen<sub>1</sub>* and *khuu<sub>1</sub>* have traditionally been regarded as copular verbs in Thai (Uppakitsinlapasarn 1964, Phanthumetha 1982, among others). According to Kuno and Wongkhamthong's (1981) study on the difference between copulative sentences with *pen<sub>1</sub>* and *khuu<sub>1</sub>*, the *pen<sub>1</sub>* sentence is used for characterization whereas the *khuu<sub>1</sub>* sentence is used for identification. This is illustrated in the following examples.

- (3) a. *ruaη<sub>3</sub> thii<sub>3</sub> chan<sub>5</sub> ca<sub>2</sub> bɔɔk<sub>2</sub>*  
story that I PROS<sup>7</sup> tell  
*khun<sub>1</sub> pen<sub>1</sub>/\*khuu<sub>1</sub> ruaη<sub>3</sub>*  
you COP story  
*sam<sub>5</sub>khan<sub>1</sub> maak<sub>3</sub>*

<sup>6</sup> PSIs in English include expressions which can only occur in a positive environment such as *some*, *already*, and *pretty*, and expressions which can only occur in a negative environment such as *any*, *ever* and *yet*.

<sup>7</sup> PROS stands for a marker for PROSPECTIVE.

<sup>4</sup> COP stands for COPULA.

<sup>5</sup> NEG stands for NEGATIVE.

important very  
“What I want to tell you is a very  
important thing.”

- b. *ruaŋ<sub>3</sub> thii<sub>3</sub> chan<sub>5</sub> ca<sub>2</sub> bɔɔk<sub>2</sub>*  
story that I PROS tell  
*khun<sub>1</sub> \*pen<sub>1</sub> / khut<sub>1</sub> chan<sub>1</sub> kam<sub>1</sub> laŋ<sub>1</sub>*  
you COP I PROG<sup>8</sup>  
*ca<sub>2</sub> tɛɛŋ<sub>2</sub> ŋaan<sub>1</sub>*  
PROS marry  
“What I want to tell you is that I am  
going to marry.”

- (4) a. *ruaŋ<sub>3</sub> thii<sub>3</sub> chan<sub>5</sub> bɔɔk<sub>2</sub> khun<sub>1</sub> cɔɔn<sub>1</sub>*  
story that I tell Mr. John  
*mua<sub>3</sub>waan<sub>1</sub> nii<sub>4</sub> pen<sub>1</sub> / \*khut<sub>1</sub>*  
yesterday this COP  
*khwaam<sub>1</sub> ciŋ<sub>1</sub>*  
fact  
“What I told John yesterday is a fact.”

- b. *ruaŋ<sub>3</sub> thii<sub>3</sub> chan<sub>5</sub> bɔɔk<sub>2</sub> khun<sub>1</sub> cɔɔn<sub>1</sub>*  
story that I tell Mr. John  
*mua<sub>3</sub>waan<sub>1</sub> nii<sub>4</sub> \*pen<sub>1</sub> / khut<sub>1</sub>*  
yesterday COP  
*khwaam<sub>1</sub> chiŋ<sub>1</sub> thii<sub>3</sub> chan<sub>5</sub> kam<sub>1</sub> laŋ<sub>1</sub>*  
fact that I PROG  
*ca<sub>2</sub> law<sub>3</sub> hay<sub>2</sub> khun<sub>1</sub> faŋ<sub>1</sub>*  
PROS tell give you listen  
“What I told John yesterday is the fact  
that I am going to tell you.”

(3a) and (4a) present one of the characteristics that their subject possesses. (3a) presents as a characteristic of what the speaker wants to tell the addressee a fact that is very important. (4a) characterizes what the speaker told John the day before as

factual. Therefore, they are characterizational sentences and the copular verb *pen<sub>1</sub>* is used. On the other hand, (3b) and (4b) are identificational sentences. (3b) identifies what the speaker wants to tell the addressee as the fact that he is getting married. (4b) identifies what the speaker told John the day before with a fact that he is going to tell the addressee. Therefore, *khut<sub>1</sub>* is used as a copular verb.

For cases in which *pen<sub>1</sub>/khut<sub>1</sub>* can be used interchangeably, it is proposed that the difference has to do with the speaker's intention (Kuno and Wongkhamthong 1981). Consider, for example, the following sentences:

- (5) a. *cɔɔn<sub>1</sub> pen<sub>1</sub> / khut<sub>1</sub> khon<sub>1</sub> thii<sub>3</sub>*  
John COP person that  
*chan<sub>5</sub> rak<sub>4</sub>*  
I love  
“John is the person that I love.”

- b. *kha<sub>1</sub>təɔ<sub>3</sub> pen<sub>1</sub> / khut<sub>1</sub>*  
Carter COP  
*pra<sub>1</sub>thaa<sub>1</sub>na<sub>1</sub>thi<sub>4</sub>ba<sub>1</sub>dii<sub>1</sub> khɔɔŋ<sub>5</sub>*  
president of  
*sa<sub>2</sub>ha<sub>2</sub>rat<sub>4</sub>?a<sub>1</sub>mee<sub>1</sub>ri<sub>1</sub>kaa<sub>1</sub>*  
the United States of America  
“Carter is the President of The  
United States of America.”

In (5a), if the speaker's intention is to present one of the characteristics that John has, *pen<sub>1</sub>* is used. On the other hand, if the speaker's intention is to state that John and the person that the speaker loves is one and the same person, *khut<sub>1</sub>* is used. Similarly, (5b) can be interpreted either as a sentence that presents one of Carter's characteristics or a sentence which equates Carter and the President of the United States of America. The

<sup>8</sup> PROG stands for a marker for PROGRESSIVE.

characterizational copula *pen*<sub>1</sub> is used for the former and the identificational copula *khuu*<sub>1</sub> is used for the latter interpretation. Therefore, there is a clear difference between *pen*<sub>1</sub> on the one hand, and *khuu*<sub>1</sub> on the other.

Copulative sentences with *pen*<sub>1</sub> and *khuu*<sub>1</sub> are also discussed in a recent study conducted by Iwasaki and Ingkaphirom (2005). According to Iwasaki and Ingkaphirom, when *pen*<sub>1</sub> appears in the sentence structure [NP<sub>1</sub> *pen*<sub>1</sub> NP<sub>2</sub>], it presents NP<sub>2</sub> as an attribute or characteristic of NP<sub>1</sub><sup>9</sup>. As illustrated in (6a) and (6b), *pen*<sub>1</sub> can be used to describe a permanent or semi-permanent condition such as a person's occupation or a person or an object's characteristics.

- (6) a. *phrɔ̌₄ phra₄ phra₄ oŋ₁ nii₄*  
 because monk monk CLS<sup>10</sup> this  
*pen₁ phra₄ caw₃kha₁na₄ tam₁bon₁*  
 COP monk abbot district  
 "Because this monk, this monk is the  
 abbot of the district."<sup>11</sup>  
 (Iwasaki and Ingkaphirom 2005:221)

- b. *pra₂maan₁ waa₃ pen₁*  
 approximate say/COMP<sup>12</sup> COP  
*tam₁ruat₂ su₁ca₁rit₂*  
 police honest  
 "It seems like he is an honest police  
 officer."  
 (Iwasaki and Ingkaphirom 2005:221)

The copula *khuu*<sub>1</sub> may also appear in the sentence structure [NP<sub>1</sub> *khuu*<sub>1</sub> NP<sub>2</sub>].

However, unlike the *pen*<sub>1</sub> sentence of attribution, the NP<sub>2</sub> of the *khuu*<sub>1</sub> sentence presents a designator or definition for NP<sub>1</sub>. This is illustrated in (7a) and (7b).

- (7) a. *cut₂ thii₃ nam₄ dhat₂ khuu₁ rɔ̌y₄*  
 point that water boil COP 100  
*oŋ₁saa₅*  
 degree  
 "The boiling point of water is 100  
 degrees."  
 (Iwasaki and Ingkaphirom 2005: 223)
- b. *ʔa₂thi₄kaan₁ba₁dii₁ khɔ̌y₅*  
 rector of  
*ma₁ha₅wi₄tha₁ya₁lay₁ tham₁ma₄saat₂*  
 university (school name)  
*khuu₁ dɔ̌k₄tə̌ə₃ su₂chaat₃*  
 COP doctor (name)  
 "The rector of Thammasat University  
 is Dr. Suchart."  
 (Iwasaki and Ingkaphirom 2005: 223)

Furthermore, in Iwasaki and Ingkaphirom's (2005) study, it is discussed that although *pen* and *khuu*<sub>1</sub> appear in sentences similar to the English copulative "A is B," neither *pen* nor *khuu*<sub>1</sub> is fully a verb. Supporting their idea, they point out that neither *pen* nor *khuu*<sub>1</sub> can be negated directly like other verbs in the Thai language, as will be discussed in section 2.2.

## 2.2 Function

In Thai a verb phrase can usually be negated by the negator "*may*<sub>3</sub>" or "*may*<sub>3</sub> *day*<sub>3</sub>" as illustrated in (8a) and (8b).

- (8) a. *som₅sak₂ may₃ pay₁ tham₁jaan₁*

<sup>9</sup> NP stands for a noun phrase.

<sup>10</sup> CLS stands for a CLASSIFIER.

<sup>11</sup> What is meant by this is "because this monk is the abbot of the district..."

<sup>12</sup> COMP stands for a COMPLEMENTIZER.

Somsak NEG go work  
“Somsak didn’t go to work.”

- b. *som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *day*<sub>3</sub> *pay*<sub>1</sub> *tham*<sub>1</sub>*ɲaan*<sub>1</sub>  
Somsak NEG go work  
“Somsak didn’t go to work.”

Regarding the negation of copulative sentences, neither *pen*<sub>1</sub> nor *khuu*<sub>1</sub> can normally be negated by the negator *may*<sub>3</sub> like other verbs.

- (9) a. \**som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *pen*<sub>1</sub>  
Somsak NEG COP  
*sa*<sub>2</sub>*a*<sub>2</sub>*thaa*<sub>5</sub>*pa*<sub>2</sub>*nik*<sub>4</sub>  
architect  
“Somsak is not an architect.”

- b. \**som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *khuu*<sub>1</sub>  
Somsak NEG COP  
*sa*<sub>2</sub>*a*<sub>2</sub>*thaa*<sub>5</sub>*pa*<sub>2</sub>*nik*<sub>4</sub>  
architect  
“Somsak is not an architect.”

To negate copulative sentences with *pen*<sub>1</sub>, the negator “*may*<sub>3</sub> *day*<sub>3</sub>” is usually used, as illustrated in (10).

- (10) *som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *day*<sub>3</sub> *pen*<sub>1</sub>  
Somsak NEG COP  
*sa*<sub>2</sub>*a*<sub>2</sub>*thaa*<sub>5</sub>*pa*<sub>2</sub>*nik*<sub>4</sub>  
architect  
“Somsak is not an architect.”

To negate copulative sentences with *khuu*<sub>1</sub>, however, the negator “*may*<sub>3</sub> *day*<sub>3</sub>” is not used. Instead, the negator “*may*<sub>3</sub> *chay*<sub>3</sub>” is used.

- (11) a. \**som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *day*<sub>3</sub> *khuu*<sub>1</sub>  
Somsak NEG COP

*sa*<sub>2</sub>*a*<sub>2</sub>*thaa*<sub>5</sub>*pa*<sub>2</sub>*nik*<sub>4</sub>  
architect  
“Somsak is not an architect.”

- b. *som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *chay*<sub>3</sub>  
Somsak NEG  
*sa*<sub>2</sub>*a*<sub>2</sub>*thaa*<sub>5</sub>*pa*<sub>2</sub>*nik*<sub>4</sub>  
architect  
“Somsak is not an architect.”

Since neither *pen*<sub>1</sub> nor *khuu*<sub>1</sub> can normally be negated by the negator *may*<sub>3</sub> like other verbs, Iwasaki and Ingkaphirom (2005) conclude that *pen*<sub>1</sub> and *khuu*<sub>1</sub> lack some verbal properties and that neither *pen*<sub>1</sub> nor *khuu*<sub>1</sub> is fully a verb.

### 2.3 The properties of polarity-sensitivity

Although it has been claimed that a copulative sentence with *khuu*<sub>1</sub> can be negated by the negator *may*<sub>3</sub> *chay*<sub>3</sub> (Iwasaki and Ingkaphirom 2005: 227), it is apparent that the copula *khuu*<sub>1</sub> cannot co-occur with the negator *may*<sub>3</sub> *chay*<sub>3</sub>. Sentence (10b) will become unacceptable if the copula *khuu*<sub>1</sub> co-occurs with the negator *may*<sub>3</sub> *chay*<sub>3</sub>, as illustrated in (12).

- (12) \**som*<sub>5</sub>*sak*<sub>2</sub> *may*<sub>3</sub> *chay*<sub>3</sub> *khuu*<sub>1</sub>  
Somsak NEG COP  
*sa*<sub>2</sub>*a*<sub>2</sub>*thaa*<sub>5</sub>*pa*<sub>2</sub>*nik*<sub>4</sub>  
architect  
“Somsak is not an architect.”

Furthermore, it is demonstrated that while the copula *khuu*<sub>1</sub> cannot co-occur with negator *may*<sub>3</sub> *chay*<sub>3</sub>, the copula *pen*<sub>1</sub> can, as in (12a).

- (13) *duu<sub>1</sub> waa<sub>2</sub> khaw<sub>5</sub> may<sub>3</sub> chay<sub>3</sub>*  
 look say/COMP she NEG  
*pen<sub>1</sub> khon<sub>1</sub> kee<sub>1</sub>ree<sub>1</sub> na<sub>4</sub> ha*  
 COP person twisted PP<sup>13</sup> SLP<sup>14</sup>  
 “She doesn’t seem to be wrongheaded.”  
 (Iwasaki and Ingkaphirom 2005: 227)

That the copula *pen<sub>1</sub>* can co-occur with verbal negators (i.e., *may<sub>3</sub> day<sub>3</sub>* and *may<sub>3</sub> chay<sub>3</sub>*) whereas the copula *khuu<sub>1</sub>* cannot suggests that the two copulas have different restrictions concerning the polarities of the environment in which they occur. The copula *khuu<sub>1</sub>* only occurs in a positive environment whereas the copula *pen<sub>1</sub>* can occur in a negative environment as well as a positive environment.

As *khuu<sub>1</sub>* is sensitive to the polarity of the environment in which it occurs whereas *pen<sub>1</sub>* is insensitive, it can be said that *khuu<sub>1</sub>* behaves like a PSI<sup>15</sup> whereas *pen<sub>1</sub>* behaves like a PII. Based on this observation, the question arises as to what makes *khuu<sub>1</sub>* and *pen<sub>1</sub>* behave differently. Answering this question, the next section examines whether the properties claimed to distinguish PSIs from PIIs in English can account for the difference between *khuu<sub>1</sub>* and *pen<sub>1</sub>*.

<sup>13</sup> PP stands for a PRAGMATIC PARTICLE.

<sup>14</sup> SLP stands for a SPEECH LEVEL PARTICLE.

<sup>15</sup> In section 3.1, PSIs which can occur only in a positive environment and are called positive-polarity items (PPIs) and PSIs which can occur only in a negative environment and are called negative-polarity items (NPIs) will be discussed. Therefore, more precisely, the copula *khuu<sub>1</sub>* is a PPI.

### 3. The theory of PSIs and the polarity-sensitive copula in Thai

This section begins with an introduction to PSIs in English (3.1). Then the theory of PSIs proposed by Israel (1996) will be summarized (3.2). Finally, whether the properties that make *khuu<sub>1</sub>* and *pen<sub>1</sub>* behaves differently are the same as those claimed to distinguish PSIs from PIIs in English (3.3) will be discussed.

#### 3.1 Introduction of PSIs in English

PSIs are expressions which can only occur in a positive environment, in the case of positive-polarity items (henceforth, referred to as PPIs), or a negative environment, in the case of negative-polarity items (henceforth, referred to as NPIs). In English, PPIs include *some*, *already*, *pretty*, whereas NPIs includes *any*, *ever*, *yet*, etc. Generally PPIs are unacceptable in negative sentences, as are NPIs in positive sentences, as demonstrated in (14) and (15), respectively.

- (14) a. \*I am not *pretty* happy with it.  
 b. I am *pretty* happy with it.

- (15) a. \*John has found his wallet *yet*.  
 b. John has not found his wallet *yet*.

Studies of PSIs are usually investigations of what makes certain contexts license polarity-sensitivity (known as the licensing question) and what makes certain forms sensitive to these contexts (known as the sensitivity question). Many of the previous studies (Klima 1964; Ladusaw 1980, 1982, 1983, 1996; Van der Wouden 1994; Linebarger 1980, 1981, 1987; Progovac 1992, 1994),

however, have focused on the NPI licensing question (i.e., what makes certain contexts license NPIs). The approach to PSIs which deals with both questions and covers both NPIs and PPIs is that of Israel (1996).

### 3.2 Israel's (1996) approach to PSIs

Israel (1996) views PSIs as words which are specified for two semantic features: quantitative value (henceforth, referred to as q-value) and informative value (henceforth, referred to as i-value) and claims that the interaction of these two features makes these words sensitive to certain contexts.

To begin with, Israel (1996) observes that some words range in terms of strength, for example, the evaluative terms *excellent*, *good* and *okay* range in the degree of approval. The word *excellent* expresses a higher degree of approval than the word *good* and the word *good* expresses a higher degree of approval than the word *okay*. Therefore, on the scale of approval the word *excellent* encodes a higher q-value than *good* and *okay*.

Based on this observation, Israel proposes that PSIs are words which encode either a high or a low q-value. For instance, on the scale of the amount of sleep, the NPI *a wink* in (16a) designates a low q-value while the NPI *much* in (16b) designates a high q-value. Similarly, on the scale of the amount of money, the PPI *scads* in (17a) encodes a high q-value and the PPI *a little bit* in (17b) encodes a low q-value.

- (16) a. Margo didn't sleep *a wink* before her big test.  
b. Margo didn't sleep *much* before her big test.

- (17) a. Belinda won *scads* of money at the Blackjack tables.  
b. Belinda won *a little bit* of money at the Blackjack tables.

So, based on the idea that a sentence containing a PSI such as (16a), (16b), (17a), and (17b) is either an emphatic or an understating sentence, Israel proposes that a PSI is also specified for i-value. To illustrate, Israel suggests that a sentence containing a PSI implicitly refers to a norm. A norm can be understood as a normal expectation in context. Sentences such as (16a) and (17a) are considered to be more informative than a norm whereas sentences such as (16b) and (17b) are less informative than a norm. According to Israel (1996), PSIs are conventionally associated with either sentences that are more informative than a norm or sentences that are less informative than a norm. The PSIs associated with the former kind of sentences can be stereotyped as conveying an emphatic force whereas those associated with the latter kind can be stereotyped as conveying an understating force. Conveying either an emphatic or understating force, PSIs are said to be specified for either a high or a low i-value, respectively.

Israel (1996), subsequently, suggests that in a negative sentence, an NPI which designates a low q-value is equipped with an emphatic force, while an NPI which designates a high q-value is equipped with an understating force. This is, however, reversed when the polarity is reversed. A PPI which designates a high q-value is equipped with an emphatic force. A PPI which designates a low q-value is equipped with an understating force.

Within Israel's (1996) analysis, an NPI will produce an emphatic or an understating sentence only in an environment where a lower position entails a higher position. To illustrate, reconsider (16a) and (16b) with respect to the following figure.

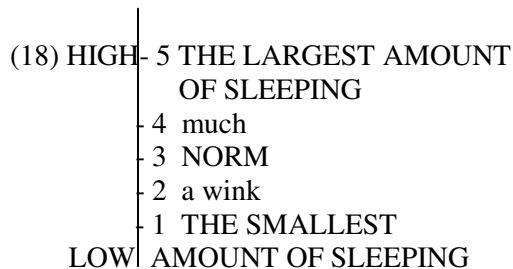


Figure 1 The scale of the amount of sleeping

Both (16a) and (16b) entail “Margo didn’t sleep the largest amount of sleeping,” which is at the higher position. Specifically, this entailment occurs in a negative environment, but never occurs in a positive environment. Consequently, the items like *a wink* and *much* require a negative environment.

In contrast, a PPI will produce an emphatic or an understating sentence only in the environment that a higher position entails a lower position. Again, consider (17a) and (17b) with respect to the following figure.

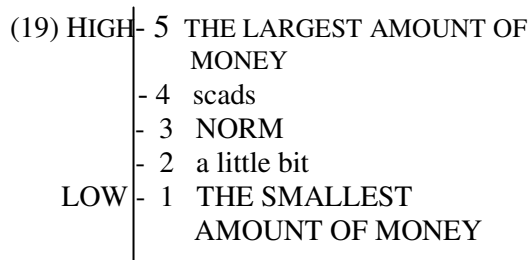


Figure 2 The scale of the amount of money

Both (17a) and (17b) entail “Belinda won the smallest amount of money at the Blackjack tables,” which is at the lower position. While this entailment occurs in a positive environment, it does not occur in a negative environment. Consequently, items like *scads* and *a little bit* require a positive environment.

Therefore, by assuming that PSIs are specified for q-value and i-value which relates to notions of emphasis and understatement, and by defining notions of emphasis and understatement in terms of entailments, both the sensitivity and the licensing problems of NPIs and PPIs can be solved.

### 3.3 The polarity-sensitive copula in Thai

Although PPIs in English can be accounted for by Israel's (1996) account, the PPI *khut*<sub>1</sub> in Thai cannot. Firstly, although PPIs in English can be said to be specified for q-value and i-value, the PPI *khut*<sub>1</sub> in Thai can not be explained in the same way. Since *khut*<sub>1</sub> is a copula, it does not carry a semantic meaning of the type that the English PPIs do. Consequently, the PPI *khut*<sub>1</sub> is not equipped with any value. Secondly, although the environments that allow PPIs in English to encode their features can be said to be environments where a higher position entails a lower position, which is a positive environment, the environments that license the copula *khut*<sub>1</sub> in Thai cannot be explained in the same way. Not equipped with those features, the copula *khut*<sub>1</sub> does not locate on any scale. Consequently, the environments that license it have nothing to do with position or



entailment. The PPI *khuu<sub>1</sub>* in Thai, therefore, cannot be accounted for in the same way as other PPIs in English.

Since it is apparent that *khuu<sub>1</sub>* does not carry a semantic meaning of the type that PPIs in English do, the question still remains as to what makes *khuu<sub>1</sub>* differ from *pen<sub>1</sub>* in polarity-sensitivity. In the following section, by investigating the aspectual properties of the two Thai copulas in comparison with those of the English copula, it will be demonstrated that *khuu<sub>1</sub>* is unique in terms of aspectual properties which possibly makes *khuu<sub>1</sub>* differ from *pen<sub>1</sub>* in polarity-sensitivity.

#### **4. Investigation into aspectual properties of the copulas**

This section begins with a brief overview of aspect (4.1). Then the aspectual properties of the copulas in Thai are examined in comparison with those of the English copula (4.2 and 4.3). Finally, a summary of the discussion on aspectual properties is provided (4.4).

##### **4.1 A brief overview of aspects**

In the study of expressions of temporality, tense and aspect are two crucial concepts (Bardovi-Harlig 2000). While tense places an event on a time line, relevant to the time of speech (past, present, future), aspect represents the different ways of viewing the internal temporal constituency of a situation (Comrie 1976:3).

Focusing on aspect, Smith (1997) proposes two kinds of aspect: viewpoint and situation. Viewpoint aspect (also known as grammatical aspect) is usually signaled by a grammatical morpheme adjacent to the verb and it is of two types: the perfective aspect and the imperfective aspect. The difference between the perfective and the imperfective aspect is explained in terms of the speaker's perspective. The perfective aspect focuses on the beginning and end of a situation, whereas the imperfective aspect focuses on the situation without definite temporal boundaries. Although the grammatical aspect is invariably interpreted with respect to a verb phrase in a sentence, languages may vary in ways in which the viewpoint aspect is expressed. In English, the viewpoint aspect is encoded in verbal inflectional morphology. Thai, however, is an isolating language with no verbal inflectional morphology. Different ways of viewing the events are usually represented by aspectual markers such as *khəəy<sub>1</sub>*, *yaŋ<sub>1</sub>*, *kham<sub>1</sub>laŋ<sub>1</sub>*, *yuu<sub>2</sub>* and *lɛw<sub>4</sub>*.<sup>16</sup>

---

<sup>16</sup> In Thai, aspectual markers can occur either before or after a verb. The words *khəəy<sub>1</sub>*, *yaŋ<sub>1</sub>* and *kham<sub>1</sub>laŋ<sub>1</sub>* occur before the verb. Visonyanggoon (2000) terms *khəəy<sub>1</sub>* a marker for existential or experiential perfect and *yaŋ<sub>1</sub>* a marker for continuative. *kham<sub>1</sub>laŋ<sub>1</sub>*, on the other hand, is a marker for the progressive aspect. According to Tansiri (2005) *kham<sub>1</sub>laŋ<sub>1</sub>* is a dynamic progressive marker. The words *yuu<sub>2</sub>* and *lɛw<sub>4</sub>* occur after the verb. According to Tansiri (2005) *yuu<sub>2</sub>* is a stative progressive marker. *lɛw<sub>4</sub>*, on the other hand, is used as a particle for the perfect meaning, the inchoative meaning and the perfective aspect. According to Chiravate (2004), *lɛw<sub>4</sub>* stands for abutment

Unlike viewpoint aspect, situation aspect (also known as lexical aspect) is conveyed by the verb and its arguments.<sup>17</sup> Basically, situation aspect involves a distinction between states and other kinds of eventualities. States are kinds of situations which do not have an internal structure. At any points of time, a state either holds or does not hold. The predicates expressing states usually have the property of [+stativity], for example, *like*, *know*, *believe*. Events, on the other hand, are kinds of situation which have an internal structure. Events include activities and accomplishments. Usually an activity does not have a culmination point (e.g., *walk*, *sing*, *drive*, *etc.*) while an accomplishment culminates at a certain point of time (e.g., *build a house*, *eat an apple*, *draw a circle*, *etc.*) Predicates expressing activities and accomplishments usually have the property of [-stativity].<sup>18</sup>

---

function and can be termed a marker for the transition of situations.

<sup>17</sup> An argument is a participant in the action or situation referred to be a lexical predicate (such as a verb).

<sup>18</sup> Following Vendler (1967), situation aspects are categorized into 4 types (known as quadripartition of situations): state, activity, accomplishment and achievement. Characterizing each type of situation, Vendler provides the following time schemata:

STATE:	<i>A loved somebody</i> from $t_1$ to $t_2$ means that any instant between $t_1$ and $t_2$ <i>A</i> loved that person.
ACTIVITY:	<i>A was running at time t</i> means that time instant $t$ is on a time stretch throughout which <i>A</i> was running.

Usually copular verbs are considered to be [+stativity] verbs. The copulas *pen*<sub>1</sub> and *khut*<sub>1</sub> in Thai, however, exhibit different aspectual restrictions. Section 4.2 will be devoted to an investigation of their restrictions on co-occurrence with adverbial phrases and auxiliary verbs.

## 4.2. Restrictions on co-occurrence with some adverbial phrases

An adverbial phrase is a phrase that adds to the meaning of a verb phrase or a whole sentence. Adverbial phrases may provide additional information about time, place, cause, reason, etc. This section investigates restrictions on the co-occurrence of the copulas with adverbial phrases indicating termination of a situation and adverbial phrases indicating a particular point of time.

### 4.2.1 Adverbial phrases indicating termination of a situation

Associated with events, *in*-adverbial phrases (e.g., *in 2 years*) and *for*-adverbial phrases (e.g., *for 2 years*) usually occur with [-stativity] verbs. *In*-adverbial phrases indicate the termination of an event, while

---

ACCOMPLISHMENT: *A was drawing a circle at t* means that  $t$  is on the time stretch in which *A* drew that circle.

ACHIEVEMENT: *A won a race between  $t_1$  and  $t_2$*  means that the time instant at which *A* won the race is between  $t_1$  and  $t_2$ .

(Vendler 1967, as cited in Verkuyle 1989: 43)

*for*-adverbial phrases do not. To illustrate, consider the following examples.

- (20) a. John built a house in 2 years  
b. \*John walked in 2 years.

- (21) a. \*John built a house for 2 years.  
b. John walked for 2 years.

In (20), indicating termination of an event, the adverbial phrase *in 2 years* can occur with a predicate with a culmination point like *built a house* but cannot occur with a predicate which has no culmination point like *walked*. On the other hand, in (21), the adverbial phrase *for 2 years*, which does not indicate termination of an event, can occur with a predicate with no culmination point like *walked* but cannot occur with a predicate with a culmination point like *built a house*.

Although these adverbial modifications are usually associated with [-stativity] verbs, in English, the [+stativity] verb *be* can occur with these adverbial phrases, as demonstrated in (22).

- (22) a. John will be a judge in 2 years.  
b. John has been a judge for 2 years.

An explanation for why the verb *be* occurs with these adverbial phrases is that the predicate *be a judge* has some properties of an event. What is described by (22a) is that in the next two years, John will start performing the job of a judge. In the same vein, (22b) denotes that John has been performing the job of a judge for the last two years.

With respect to these adverbial modifications, the copulas in Thai show some restrictions.

The copula *pen*<sub>1</sub> can occur with *in*-adverbial and *for*-adverbial phrases, while the copula *khut*<sub>1</sub> cannot. This is illustrated below.

- (23) a. *som*<sub>5</sub>*sak*<sub>2</sub> *ca*<sub>2</sub> *pen*<sub>1</sub>  
Somsak PROS COP  
*phuu*<sub>3</sub>*phi*<sub>4</sub>*phaak*<sub>3</sub>*saa*<sub>5</sub>  
judge  
*nay*<sub>1</sub> *ʔiik*<sub>2</sub> *sɔɔŋ*<sub>5</sub> *pii*<sub>1</sub>  
in more two year  
“Somsak will be a judge in two years.”

- b. *som*<sub>5</sub>*sak*<sub>2</sub> *pen*<sub>1</sub>  
Somsak COP  
*phuu*<sub>3</sub>*phi*<sub>4</sub>*phaak*<sub>3</sub>*saa*<sub>5</sub> *maa*<sub>1</sub> *sɔɔŋ*<sub>5</sub>  
judge PERF<sup>19</sup> two  
*pii*<sub>1</sub> *lɛɛw*<sub>4</sub>  
year PERF  
“Somsak has been a judge for two years.”

- (24) a. \**som*<sub>5</sub>*sak*<sub>2</sub> *ca*<sub>2</sub> *khut*<sub>1</sub>  
Somsak PROS COP  
*phuu*<sub>3</sub>*phi*<sub>4</sub>*phaak*<sub>3</sub>*saa*<sub>1</sub> *nay*<sub>1</sub> *ʔiik*<sub>2</sub>  
judge in more  
*sɔɔŋ*<sub>5</sub> *pii*<sub>1</sub>  
two year  
“Somsak will be a judge in two years.”

- b. \**som*<sub>5</sub>*sak*<sub>2</sub> *khut*<sub>1</sub> *phuu*<sub>3</sub>*phi*<sub>4</sub>*phaak*<sub>3</sub>*saa*<sub>5</sub>  
Somsak COP judge  
*maa*<sub>1</sub> *sɔɔŋ*<sub>5</sub> *pii*<sub>1</sub> *lɛɛw*<sub>4</sub>  
PERF two year PERF  
“Somsak has been a judge for two years.”

<sup>19</sup> PERF stands for a marker for PERFECT.

As these adverbial modifications are usually associated with events, the copulas that allow these adverbial modifications must carry an eventive interpretation or denote the sense of performing. As the copulas *be* and *pen<sub>1</sub>* allow these adverbial modifications while the copula *khut<sub>1</sub>* does not, it follows that the copulas *be* and *pen<sub>1</sub>* convey the sense of performing while the copula *khut<sub>1</sub>* does not.

#### 4.2.2 Adverbial phrases indicating a particular point of time

Adverbial phrases such as *when I was 55 years old* indicate a particular point of time whereas adverbial phrases such as *in the past* do not. The copulas *be* in English and the copulas *pen<sub>1</sub>* and *khut<sub>1</sub>* in Thai can occur with adverbial phrases which do not indicate a particular point of time, as demonstrated in (25) and (26).

(25) In the past, John was the Minister of Agriculture.

(26) a. *mua<sub>3</sub> kɔɔn<sub>2</sub> som<sub>5</sub>sak<sub>2</sub> pen<sub>1</sub>*  
 when before Somsak COP  
*rat<sub>4</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub> kra<sub>2</sub>suaŋ<sub>1</sub>ka<sub>1</sub>set<sub>2</sub>*  
 the Minister of Agriculture  
 “In the past Somsak was the Minister of agriculture.”

b. *mua<sub>3</sub> kɔɔn<sub>2</sub> som<sub>5</sub>sak<sub>2</sub> khut<sub>1</sub>*  
 when before Somsak COP  
*rat<sub>4</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub> kra<sub>2</sub>suaŋ<sub>1</sub>ka<sub>1</sub>set<sub>2</sub>*  
 the Minister of Agriculture  
 “In the past Somsak was the Minister of agriculture.”

However, these copulas show some restrictions on adverbial phrases indicating a particular point of time. While the copulas *be* and *pen<sub>1</sub>* can occur with adverbial phrases indicating a particular point of time, the copula *khut<sub>1</sub>* cannot, as shown in (27) and (28).

(27) John was the Minister of Agriculture when he was 55 years old.

(28) a. *som<sub>5</sub>sak<sub>2</sub> pen<sub>1</sub> rat<sub>2</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub>*  
 Somsak COP minister  
*tɔɔn<sub>1</sub> ʔaa<sub>1</sub>yu<sub>2</sub> 55 pii<sub>1</sub>*  
 when age 55 year  
 “Somsak was a minister when he was 27 years old.”

b. *\*som<sub>5</sub>sak<sub>2</sub> khut<sub>1</sub> rat<sub>2</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub>*  
 Somsak COP minister  
*tɔɔn<sub>1</sub> ʔaa<sub>1</sub>yu<sub>2</sub> 55 pii<sub>1</sub>*  
 when age 55 year  
 “Somsak was a minister when he was 55 years old.”

Crucially, while adverbial phrases which do not indicate a particular point of time like *in the past* do not involve the idea of transition, adverbial phrases which indicate a particular point of time such as *when he was 55 years old* do. In (27), as the verb phrase (*John*) *was the Minister of Agriculture* is modified by the adverbial phrase *when he was 55 years old*, it involves the idea of that before John was 55 years old, he was not the Minister of Agriculture, but after he turned to 55 years old he became the Minister of Agriculture. Therefore, it seems that copulas that allow adverbial phrases indicating a particular point of time are associated with the interpretation of transition. As the copulas *be* and *pen<sub>1</sub>* allow

this kind of adverbial modification while the copula *khut*<sub>1</sub> does not, it follows that the copulas *be* and *pen*<sub>1</sub> are associated with a sense of transition whereas the copula *khut*<sub>1</sub> is not<sup>20</sup>.

#### 4.3 Restrictions on co-occurrence with some auxiliary verbs

An auxiliary verb is a verb that is used with another verb to show its tense, person, mood etc. In English the auxiliary verbs are ‘be’, ‘do’, and ‘have’ (as in ‘I am running’, ‘I didn’t go’, ‘they have gone’) and all the modals. In Thai, however, auxiliary verbs have been claimed to include modals and aspectual markers (Kanchanawan 1978 and

Thepkanchana 1986, as cited in Visonyangoon 2000: 114). Modals are usually used with other verbs to express ideas such as possibility, intention, permission and ability. Meanwhile, aspectual markers are used to convey different ways of viewing the internal temporal constituency of a situation. This section investigates restrictions on the co-occurrence of the copulas with a modal (i.e., the marker for permission and ability) and an aspectual marker (i.e., the special progressive marker).

##### 4.3.1 The marker for permission and ability

In English, the modal verb *can* is used to express ability and permission. In some cases, it can occur with the verb *be*, as shown by the following.

- (29) a. John can be the company’s representative.  
b. \*John can be an American.

The modal verb *can* may occur in (29a) but not in (29b). This can be accounted for by the fact that the predicate *be the company’s representative* has the flavor of an active predicate “to act as...” whereas the predicate *be an American* does not. Therefore, while the predicate *be an American* cannot occur with the modal verb expressing ability and permission, the predicate *be the company representative* can.

In Thai, the word *day*<sub>3</sub> can be interpreted in many ways. It can function as a perfective marker and also a modal for permission and ability (Visonyangoon 2000). Functioning as a modal for permission and ability, the

<sup>20</sup> Although it has been pointed out that both *pen*<sub>1</sub> and *khut*<sub>1</sub> can co-occur with the adverbial phrase indicating a particular point of time like *mua<sub>3</sub> pii<sub>1</sub> 2500* (in the year of 2500), the interpretations of the *pen*<sub>1</sub> and *khut*<sub>1</sub> sentences are different. This is demonstrated in (i) and (ii).

(i) *somsak<sub>2</sub> pen<sub>1</sub> rat<sub>2</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub> mua<sub>3</sub> pii<sub>1</sub> 2500*  
Somsak COP minister when year 2500  
“Somsak has become the minister in the year of 2500.”

(ii) *somsak<sub>2</sub> khut<sub>1</sub> rat<sub>2</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub> mua<sub>3</sub> pii<sub>1</sub> 2500*  
Somsak COP minister when year 2500  
“The minister in the year of 2500 is Somsak.”

In (i) *mua<sub>3</sub> pii<sub>1</sub> 2500* (in the year of 2500) modifies the event of becoming a minister. In (ii), however, *mua<sub>3</sub> pii<sub>1</sub> 2500* (in the year of 2500) cannot function as an event modifier. Instead, it functions as a modifier of the noun phrase *rat<sub>2</sub>tha<sub>1</sub>mon<sub>1</sub>trii<sub>1</sub>* (the minister). This, again, suggests that the copula *pen*<sub>1</sub> is associated with the idea of transition whereas the copula *khut*<sub>1</sub> is not.

word *day<sub>3</sub>* may occur with the copula *pen<sub>1</sub>* but it cannot occur with the copula *khut<sub>1</sub>*, as demonstrated in (30)<sup>21</sup>.

- (30) a. *som<sub>5</sub>sak<sub>2</sub>*      *day<sub>3</sub>*      *pen<sub>1</sub>*  
          Somsak   ABIL/PERM<sup>22</sup>   COP  
          *tua<sub>1</sub>theen<sub>1</sub>*   *bɔɔ<sub>1</sub>ri<sub>1</sub>sat<sub>2</sub>*  
          representative company  
          “Somsak can be the company’  
          representative.”
- b. \**som<sub>5</sub>sak<sub>2</sub>*      *day<sub>3</sub>*      *khut<sub>1</sub>*  
          Somsak   ABIL/PERM   COP  
          *tua<sub>1</sub>theen<sub>1</sub>*   *bɔɔ<sub>1</sub>ri<sub>1</sub>sat<sub>2</sub>*  
          representative company  
          “Somsak can be the company’  
          representative.”

Since the copula *khut<sub>1</sub>* behaves like the copula *be* in (29a) whereas the copula *pen<sub>1</sub>* behaves like the copula *be* in (29b), it can be concluded that the copula *pen<sub>1</sub>* has the flavor of an eventive verb whereas the copula *khut<sub>1</sub>* does not.

#### 4.3.2 The progressive marker

In English the form *be...-ing* is considered to be the progressive form (i.e., indicating that a situation is in progress). Usually the progressive form can only occur with eventive verbs, as in (31). Stative verbs in

the progressive form usually result in ungrammaticality, as in (32)

- (31) a. John was building a house.  
       b. John was eating an apple.
- (32) a. \*John was liking Mary.  
       b. \*John was knowing Mary.

Indicating that a situation in progress continues, the progressive form *be...-ing* can co-occur with the phasal adverb *still* (e.g., *John was still building a house. John was still eating an apple.*) The form *still...be-ing* is usually limited to eventive verbs. As expected, the copular verb *be* cannot occur in this form. This is illustrated in (33).

- (33) \*John is still being the dean.

In Thai, phases of continuation and progressiveness are expressed by the aspectual markers *yaŋ<sub>1</sub>* and *yuu<sub>2</sub>*, respectively. Like those in English, these two elements may co-occur. Crucially, the copula *pen<sub>1</sub>* can occur with *yaŋ<sub>1</sub>...yuu<sub>2</sub>* but the copula *khut<sub>1</sub>* cannot, as demonstrated in (34).

- (34) a. *som<sub>5</sub>sak<sub>2</sub>*      *yaŋ<sub>1</sub>*      *pen<sub>1</sub>*  
          Somsak   CONT<sup>23</sup>   COP  
          *kha<sub>4</sub>na<sub>4</sub>ba<sub>1</sub>dii<sub>1</sub>*   *yuu<sub>2</sub>*  
          dean                PROG  
          “Somsak is still the dean.”
- b. \**som<sub>5</sub>sak<sub>2</sub>*      *yaŋ<sub>1</sub>*      *khut<sub>1</sub>*  
          Somsak   CONT   COP  
          *kha<sub>4</sub>na<sub>4</sub>ba<sub>1</sub>dii<sub>1</sub>*   *yuu<sub>2</sub>*

<sup>21</sup> In the same way that the copula *khut<sub>1</sub>* does not allow a modal for permission and ability (*day<sub>3</sub>*), it does not allow other modals including modals for probability (*khoy<sub>1</sub>* and *naa<sub>2</sub>ca<sub>2</sub>*) and obligation (*tɔŋ<sub>3</sub>*).

<sup>22</sup> ABIL/PERM stands for a marker for ABILITY/PERMISSION.

<sup>23</sup> CONT stands for a marker for CONTINUATIVE.

dean                      PROG  
 “Somsak is still the dean.”

In (34a) and (34b), since the copula *pen<sub>1</sub>* can occur with the markers for phases of continuation and progressiveness whereas the the copula *khuu<sub>1</sub>* cannot, it can be concluded that the copula *pen<sub>1</sub>*, compared with the copulas *khuu<sub>1</sub>*, is more likely to behave like an eventive verb.

#### 4.4 Summary of the aspectual properties of the copulas

From the investigation of the co-occurrence of the copulas with adverbial phrases and auxiliary verbs, it is evident that the copulas *pen<sub>1</sub>* and *khuu<sub>1</sub>* in Thai and the copula *be* in English differ in their interpretation and distribution. Although they are all supposed to express states, they are found to have different aspectual properties. The aspectual properties of each of the copulas can be summarized below.

(35) Summary of the aspectual properties of the copulas in Thai and English

##### The copula *pen<sub>1</sub>* in Thai

- ✓ occurring with an in-adverbial
- ✓ occurring with a phrase indicating a particular point of time
- ✓ occurring with a modal expressing permission/ability
- ✓ occurring with a progressive marker

##### The copula *be* in English

- ✓ occurring with an in-adverbial
- ✓ occurring with a phrase indicating a

- ✓ particular point of time
- ✓ occurring with a modal expressing permission/ability
- X occurring in the progressive form

##### The copula *khuu<sub>1</sub>* in Thai

- X occurring with an in-adverbial
- X occurring with a phrase indicating a particular point of time
- X occurring with a modal expressing permission/ability
- X occurring with a progressive marker

To summarize, among the three copulas, the copula *pen<sub>1</sub>* is found to be a copula with the semantic of [-stativity]. The copula *khuu<sub>1</sub>*, on the other hand, is a copula with the semantic feature of [+stativity]. The copula *be* is found to be in between *pen<sub>1</sub>* and *khuu<sub>1</sub>* but nevertheless behaves more like *pen<sub>1</sub>* than *khuu<sub>1</sub>*.

Since the copula *khuu<sub>1</sub>*, which is polarity-sensitive, differs from the copulas *pen<sub>1</sub>* and *be*, which are polarity-insensitive, in that it has the semantic of [+stativity], it is likely that the properties of polarity-sensitivity that the copula *khuu<sub>1</sub>* possesses is related to its semantic feature of [+stativity].

## 5. Aspectual properties and polarity-sensitivity

Since aspect and polarity-sensitivity are both restrictions on a verb phrase and have to be interpreted with respect to a verb phrase in a sentence, it seems possible that there might be a connection between aspect and polarity-sensitivity. A possible direction in which

they might be related involves the distinction between verbs and non-verbs as will be discussed below.

Generally Thai linguists take the view that Thai lexical items can be categorized into two main lexical categories: the categories of verbs and non-verbs. Verbs are usually associated with eventive meaning whereas the meaning of non-verbs naturally involves stativity. In this study, it is apparent that the meaning of the copula *khuu<sub>1</sub>* involves stativity, whereas the copula *pen<sub>1</sub>* is associated with eventive meaning. Therefore, the copulas *khuu<sub>1</sub>* and *pen<sub>1</sub>* should be considered to be a non-verbal copula and a verbal copula, respectively.

In addition to the difference in meaning, verbs and non-verbs have been claimed to differ in terms of negatability. Verbs can be negated but non-verbs cannot. Now as *pen<sub>1</sub>* is a verbal copula, its co-occurrence with a negator (i.e., *may<sub>3</sub> day<sub>3</sub>* or *may<sub>3</sub> chay<sub>3</sub>*) is predicted to be grammatical. On the other hand, as *khuu<sub>1</sub>* is a non-verbal copula, it cannot be negated like a verb. The co-occurrence of *khuu<sub>1</sub>* with any verbal negators, therefore, causes ungrammaticality. As a result, while the copula *pen<sub>1</sub>* behaves like a PII, the copula *khuu<sub>1</sub>* behaves like a PPI.

The idea that *pen<sub>1</sub>* is a copula with verbal properties while *khuu<sub>1</sub>* is a copula lacking such properties is not inconsistent with Iwasaki and Ingkaphirom's (2005) analysis of Thai copulas. According to Iwasaki and Ingkaphirom, the word *pen<sub>1</sub>* is more or less like verb and it is considered to be a semi-verbal. The word *khuu<sub>1</sub>*, on the other hand, behaves more like a linker rather than a

verb. The word *khuu<sub>1</sub>* introduces a designator with a meaning similar to 'in other words,' or 'that is' in English. Moreover, they also note that *khuu<sub>1</sub>* may appear as a hesitation marker similar to 'I mean' in English.

Additionally, the claim that verbs can be negated but non-verbs cannot is supported by a number of pieces of research on the distinction between verbs and non-verbs. As a matter of fact, negability has been widely used as a test to distinguish words with verbal properties from those lacking such properties. According to Visonyanggoon's (2000) syntactic explanation, a negation phrase situates at the specifier position of a head with verbal properties. Therefore, words with verbal properties or verbs can be negated but words without verbal properties or non-verbs cannot.

To sum up, although the direction in which aspect and polarity-sensitivity might be related is pointed out, there are several issues future studies on aspect need to address. One of them concerns semantic features [+stativity]. Although it has been claimed that the meaning of non-verbs naturally involves stativity, more empirical evidence supporting this claim is called for.

## 6. Conclusion

In conclusion, this study deals with the copulas *pen<sub>1</sub>* and *khuu<sub>1</sub>* in Thai. Based on the observation that the copula *khuu<sub>1</sub>* only occurs in a positive environment whereas the copula *pen<sub>1</sub>* can occur in both positive and negative environments, this study attempts to explain why the two copulas



differ in polarity-sensitivity. Since the polarity-sensitive copula in Thai does not carry a meaning of the type the PSIs in English do, the earlier theory on PSIs (Israel, 1996) has not resulted in an adequate explanation. As aspect is a restriction over a verb phrase similar to polarity-sensitivity, this study has investigated the aspectual properties of the two Thai copulas. It is, then, discussed that the difference in polarity-sensitivity is due to the status of *pen<sub>1</sub>* and *khuu<sub>1</sub>* as verb and non-verb, respectively. What possibly makes *pen<sub>1</sub>* a verb and *khuu<sub>1</sub>* a non-verb is their aspectual properties of [-stativity] and [+stativity], respectively.

Contributing to the study of aspect and polarity-sensitivity, this study demonstrates how Thai copulas differ from the copula *be* in English. In English, the copula *be* is used for a variety of senses including characterization (or attribute), identification (or designator). Thai, however, deals with characterization and identification by means of two different words, namely *pen<sub>1</sub>* and *khuu<sub>1</sub>*, respectively. Moreover, while a copula is typically considered to be a verb in the same way as *be* in English, the copulas in Thai are not necessary verbs. Here, in accordance with Iwasaki and Ingkaphirom, (2005), the word *pen<sub>1</sub>* is considered to be a verbal copula but *khuu<sub>1</sub>* is considered to be a non-verbal copula. That the copulas in Thai differ from the copula in English in characteristics and classification suggests that the macro-category of the so-called copular verbs is too vague to describe cross-linguistic variation.

## References

- Bardovi-Harlig, K. 2000. Tense and Aspect in Second Language Acquisition: Form, Meaning, and Use. *Language Learning*, 50 (Suppl.1).
- Chiravate, B. 2004. Why is it both an Aspectual Marker and a Conjunction? *Silpakorn University International Journal*, 4 (1-2), 85-105.
- Comrie, B. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Israel, M. 1996. Polarity Sensitivity as Lexical Semantics, *Linguistics and Philosophy*, 5, 619-666.
- Iwasaki, S. & Ingkaphirom, P. 2005. *A Reference Grammar of Thai*. Cambridge: Cambridge University Press.
- Kanchanawan, N. 1978. *Expressions for Time in the Thai Verb and its Application to Thai-English Machine Translation*. Ph.D. dissertation, University of Texas.
- Klima, E. 1964. Negation in English. In J.A. Fodor and J. Katz (Eds), *The Structure of Language*, 246-323. New York: Prentice-Hall.
- Kuno, S. and Wongkhamthong, W. 1981. Characterizational and Identificational Sentences in Thai. *Studies in Language*, 5, 65-109.
- Ladusaw, W.A. 1980. *Polarity Sensitivity as Inherent Scope Relation*. Garland, New York.

- . 1982. On the notion of Affective in the Analysis of Negative Polarity Items. *Journal of Linguistics Research* 2, 1-16.
- . 1983. Logical Form and Conditions on Grammaticality. *Linguistics and Philosophy* 6, 373-392.
- . 1996. Negative-polarity Items. In S. Lappin (Ed.), *The Handbook of Contemporary Semantic Theory*, 321-341.
- Linebarger, M.C. 1980. *The Grammar of Negative Polarity*, Ph.D. Dissertaion, MIT, Cambridge, Massachusetts.
- . 1981. *The Grammar of Negative Polarity*. Indiana University Linguistics Club, Bloomington.
- . 1987. Negative Polarity and Grammatical Representation. *Linguistics and Philosophy*, 10, 523-87.
- Phanthumetha, N. 1982. Waiyakornthai [Thai Grammar], Rungruangarnkarnphim, Bangkok.
- Progovac, L. 1992. Negative Polarity: a Semantico-syntactic Approach. *Lingual* 86: 271-299.
- Progovac, L. 1994. *Negative and Positive Polarity: a Binding Approach*. Cambridge; University Press.
- Smith, C. 1997. *The Parameter of Aspects*. Kluwer Academic Publishers, Dordrecht, The Netherlands.
- Tansiri, K. 2005. *Interactions between Grammatical Aspect and Lexical Aspect: A Case Study of Alternating Intransitive Constructions in Thai*. M.A. thesis, Chulalongkorn University.
- Thepkanjana, K. 1986. *Serial Verb Construction in Thai*. Ph.D. dissertation, University of Michigan.
- Uppakitsinlapasarn, Phaya 1964. Waiyakornthai [Thai Grammar], Thai Wattana Phanit, Bangkok.
- Van der Wouden, T. 1994. Polarity and Illogical Negation. In Kanazawa, M., and Pinon, C.(Eds), *Dynamics, Polarity and Quantification*, 17-45.
- Vendler, Z. 1967. *A Theory of Aspectuality*. Cambridge: Cambridge University Press.
- Verkuyle, H. 1989. Aspectual Class and Aspectual Composition. *Linguistic and Philosophy*, 12: 95-131.
- Visonyangoon, S. 2000. *Parallelism between Noun Phrases and Clauses in Thai*. Ph.D. dissertation, Michigan State University.