ASPECTUAL PROPERTIES AND POLARITY-SENSITIVITY OF COPULAS \textit{pen}_1 AND \textit{khuu}_1 IN THAI \(^1\)

Boonjeera Chiravate\(^2\)

Abstract

‘\textit{Pen}_1’ and ‘\textit{khuu}_1’ 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 too vague to describe cross-linguistic variation.

1. Introduction

Copulas are considered to be fundamental in any language. In Thai, there are two copulas: \textit{pen}_1 and \textit{khuu}_1. 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 \textit{pen}_1 can occur in both positive and negative environments whereas the copula \textit{khuu}_1 can only occur in a positive environment, as illustrated in (1) to (2).

\(^1\) In this article, data from Thai is transcribed based on the following transcription system. Consonants:

\begin{align*}
& p \quad t \quad c \quad k \quad ? \\
& ph \quad th \quad ch \quad kh \\
& b \quad d \\
& f \quad s \quad h \\
& m \quad n \quad \eta \\
& l \quad r \\
& w \quad y
\end{align*}

Vowels:

\begin{align*}
& i \quad ii \quad u \quad uu \quad u \quad uu \\
& e \quad ee \quad o \quad oo \quad o \quad oo \\
& \varepsilon \quad \varepsilon e \quad a \quad aa \quad \varnothing \quad \varnothing
\end{align*}

Diphthongs:

\begin{align*}
& ia \quad iu \quad ia
\end{align*}

Tones:

\begin{align*}
& 1 \text{ stands for a mid tone.} \\
& 2 \text{ stands for a low tone.} \\
& 3 \text{ stands for a falling tone.} \\
& 4 \text{ stands for a high tone.} \\
& 5 \text{ stands for a rising tone.}
\end{align*}

\(^2\) Assistant Professor, Department of English, Faculty of Arts, Silpakorn University

\(^1\) This article has been developed from a thesis entitled \textit{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.
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 *khun* and *pen* 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 *khun* strikingly differ from PSIs in English and that the difference between *khun* and *pen* does not involve those semantic properties claimed to distinguish PSIs from PII in English.

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* and *khun* have traditionally been regarded as copular verbs in Thai (Uppakitsinlapasarn 1964, Phanthumetha 1982, among others). According to Kuno and Wongkhomthong’s (1981) study on the difference between copulative sentences with *pen* and *khun*, the *pen* sentence is used for characterization whereas the *khun* sentence is used for identification. This is illustrated in the following examples.

(3) a. *ruat* *thii* *chan* *ca* *bok* story that I PROS tell *khun* /*khun* *ruat* *you* COP *sam* *khan* story

---

4 COP stands for COPULA.
5 NEG stands for NEGATIVE.

6 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.

7 PROS stands for a marker for PROSPECTIVE.
Aspectsual Properties and Polarity-sensitivity of Copulas pen₁ and khun₁ in Thai

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

b. ruaŋ¹ thii₃ chan₃ ca₂ book₂
story that I PROS tell
khun₁ *pen₁/khun₁ chan₁ kam₁ laŋ₁
you COP I PROG³
ca₂  tεŋŋ₂ yaan₁
PROS marry
“What I want to tell you is that I am
going to marry.”

(4a) ruaŋ¹ thii₃ chan₃ book₂ khun₁ ɛɔɛ₁
story that I tell Mr. John
mua₂ waan₁ ɛi₄ pen₁/* khun₁
yesterday this COP
khwaam₁ ciŋ₁
fact
“What I told John yesterday is a fact.”

(4a) presents one of the
classical properties of the copular verb
pen₁. On the other hand, (3a) is an
identification sentence. (3a) identifies what
the speaker wants to tell the addressee as a
fact that is very important. (4a) characterizes what
the speaker told John the day before as a
factual. Therefore, they are characterizational
sentences and the copular verb pen₁ 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, khun₁
is used as a copular verb.

For cases in which pen₁/khun₁ can be used
interchangeably, it is proposed that the
difference has to do with the speaker’s
tention (Kuno and Wongkomthong 1981).
Consider, for example, the following sentences:

(5a) cəɔɛ₁ pen₁/khun₁ khon₁ thii₃
John COP person that
chan₃ rak₄
I love
“What I told John yesterday is the fact
that I am going to tell you.”

(5b) kha₁ təɔ₁ pen₁/khun₁
Carter COP
pra₁ thaa₁ na₁ thī₁ ba₁ dii₁ khɔɔŋ₃
president of
saa₁ həa₁ rat₁ a₁ me₁ ri₁ kaa₁
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, pen₁ 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, khun₁ 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

³ PROG stands for a marker for PROGRESSIVE.
characterizational copula *pen*₁ is used for the former and the identificational copula *khun*₁ is used for the latter interpretation. Therefore, there is a clear difference between *pen*₁ on the one hand, and *khun*₁ on the other.

Copulative sentences with *pen*₁ and *khun*₁ are also discussed in a recent study conducted by Iwasaki and Ingkaphirom (2005). According to Iwasaki and Ingkaphirom, when *pen*₁ appears in the sentence structure [NP₁ *pen*₁ NP₂], it presents NP₂ as an attribute or characteristic of NP₁.⁹ As illustrated in (6a) and (6b), *pen*₁ 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. *phra₄ phra₄ phra₄* *majh*₂ *bon*₁ because monk monk CLS this *pen*₁ *phra₄ *caw*₃ *kh*₄ *na*₄ *tam*₁ *bon*₁ COP monk abbot district “Because this monk, this monk is the abbot of the district…” (Iwasaki and Ingkaphirom 2005:221)

b. *pra₃* *maan*₁ *waa₃* *pen*₁ approximate say/COMP COP *tam*₁ *ruat*₂ *su*₃ *rit*₂ police honest “It seems like he is an honest police officer.” (Iwasaki and Ingkaphirom 2005:221)

The copula *khun*₁ may also appear in the sentence structure [NP₁ *khun*₁ NP₂]. However, unlike the *pen*₁ sentence of attribution, the NP₂ of the *khun*₁ sentence presents a designator or definition for NP₁. This is illustrated in (7a) and (7b).

(7) a. *cut*₂ *thii₃ nam*₄ *duat*₂ *khun*₁ rɔɔy₄ point that water boil COP 100 °saa₅ degree “The boiling point of water is 100 degrees.” (Iwasaki and Ingkaphirom 2005: 223)

b. *ʔa₂* *thi₃* *kaan₁* *ba₁* *dii₁* *kh*₂ *ma*₁ *θi₃* rector of *ma₃* *ha₃* *wa*₃ *tha*₁ *ya*₄ *lay*₁ *tam*₄ *saat₂* university (school name) *khun*₁ *dΘ₃* *sua*₃ *chaat₃* 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 *khun*₁ appear in sentences similar to the English copulative “A is B,” neither *pen* nor *khun*₁ is fully a verb. Supporting their idea, they point out that neither *pen* nor *khun*₁ 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 “may₃” or “may₃ day₃” as illustrated in (8a) and (8b).

(8) a. *som₃* *sak₂* *may₃* *pay₁* *tham*₃ *yaan₁*
Aspectual Properties and Polarity-sensitivity of Copulas pen₁ and khun₁ in Thai

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

b. som₅sak₂ may₃ day₃ pay₁ tham₁yaa₁
Somsak NEG go work
“Somsak didn’t go to work.”

Regarding the negation of copulative sentences, neither pen₁ nor khun₁ can normally be negated by the negator may₃ like other verbs.

(9) a. *som₅sak₂ may₃ pen₁
Somsak NEG COP sa₂thaa₃pa₃nik₄
architect
“Somsak is not an architect.”

b. *som₅sak₂ may₃ khun₁
Somsak NEG COP sa₂thaa₃pa₃nik₄
architect
“Somsak is not an architect.”

To negate copulative sentences with pen₁, the negator “may₃ day₃” is usually used, as illustrated in (10).

(10) som₅sak₂ may₃ day₃ pen₁
Somsak NEG COP sa₂thaa₃pa₃nik₄
architect
“Somsak is not an architect.”

To negate copulative sentences with khun₁, however, the negator “may₃ day₃” is not used. Instead, the negator “may₃ chay₃” is used.

(11) a. *som₅sak₂ may₃ day₃ khun₁
Somsak NEG COP sa₂thaa₃pa₃nik₄
architect
“Somsak is not an architect.”

b. som₅sak₂ may₃ chay₃
Somsak NEG COP sa₂thaa₃pa₃nik₄
architect
“Somsak is not an architect.”

Since neither pen₁ nor khun₁ can normally be negated by the negator may₃ like other verbs, Iwasaki and Ingkaphirom (2005) conclude that pen₁ and khun₁ lack some verbal properties and that neither pen₁ nor khun₁ is fully a verb.

2.3 The properties of polarity-sensitivity

Although it has been claimed that a copulative sentence with khun₁ can be negated by the negator may₃ chay₃ (Iwasaki and Ingkaphirom 2005: 227), it is apparent that the copula khun₁ cannot co-occur with the negator may₃ chay₃. Sentence (10b) will become unacceptable if the copula khun₁ co-occurs with the negator may₃ chay₃, as illustrated in (12).

(12) *som₅sak₂ may₃ chay₃ khun₁
Somsak NEG COP sa₂thaa₃pa₃nik₄
architect
“Somsak is not an architect.”

Furthermore, it is demonstrated that while the copula khun₁ cannot co-occur with negator may₃ chay₃, the copula pen₁ can, as in (12a).
look say/COMP she NEG
COP person twisted PP

“She doesn’t seem to be wrongheaded.”
(Iwasaki and Ingkaphirom 2005: 227)

That the copula pen can co-occur with verbal negators (i.e., may and may) whereas the copula khun cannot suggests that the two copulas have different restrictions concerning the polarities of the environment in which they occur. The copula khun only occurs in a positive environment whereas the copula pen can occur in a negative environment as well as a positive environment.

As khun is sensitive to the polarity of the environment in which it occurs whereas pen is insensitive, it can be said that khun behaves like a PSI whereas pen behaves like a PII. Based on this observation, the question arises as to what makes khun and pen behave differently. Answering this question, the next section examines whether the properties that make khun and pen behaves differently are the same as those claimed to distinguish PSIs from PIs in English (3.3) will be discussed.

### 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 khun and pen behaves differently are the same as those claimed to distinguish PSIs from PIs 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.

(18) HIGH- 5 THE LARGEST AMOUNT
       -4 much
       -3 NORM
       -2 a wink
       -1 THE SMALLEST
LOW- 4 AMOUNT OF SLEEPING

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.

(19) HIGH- 5 THE LARGEST AMOUNT OF MONE
       -4 scads
       -3 NORM
       -2 a little bit
LOW- 1 THE SMALLEST AMOUNT OF MONE

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 khūt in Thai cannot. Firstly, although PPIs in English can be said to be specified for q-value and i-value, the PPI khūt in Thai can not be explained in the same way. Since khūt is a copula, it does not carry a semantic meaning of the type that the English PPIs do. Consequently, the PPI khūt 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 khūt in Thai cannot be explained in the same way. Not equipped with those features, the copula khūt does not locate on any scale. Consequently, the environments that license it have nothing to do with position or...
entailment. The PPI khun in Thai, therefore, cannot be accounted for in the same way as other PPIs in English.

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

4. Investigation into aspecual properties of the copulas

This section begins with a brief overview of aspect (4.1). Then the aspecual 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 aspecual 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 aspecual markers such as khɔɔy1, yaŋ1, kham1laŋ1, yuŋ2 and leew4.16

16 In Thai, aspecual markers can occur either before or after a verb. The words khɔɔy1, yaŋ1 and kham1laŋ1 occur before the verb. Visonyanggoon (2000) terms khɔɔy1 a marker for existential or experiential perfect and yaŋ1 a marker for continuative. kham1laŋ1, on the other hand, is a marker for the progressive aspect. According to Tansiri (2005) kham1laŋ1 is a dynamic progressive marker. The words yuŋ2 and leew4 occur after the verb. According to Tansiri (2005) yuŋ2 is a stative progressive marker. Leew4, on the other hand, is used as a particle for the perfect meaning, the inchoative meaning and the perfective aspect. According to Chiravate (2004), leew4 stands for abutment.
Unlike viewpoint aspect, situation aspect (also known as lexical aspect) is conveyed by the verb and its arguments. 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].

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

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

18 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:**

A loved somebody from $t_1$ to $t_2$ means that any instant between $t_1$ and $t_2$ A loved that person.

**ACTIVITY:**

A was running at time $t$ means that time instant $t$ is on a time stretch throughout which A was running.

Usually copular verbs are considered to be [+stativity] verbs. The copulas pen$_1$ and khun$_1$ 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\textsubscript{1} can occur with in-adverbial and for-adverbial phrases, while the copula kh\textsubscript{1} cannot. This is illustrated below.

(23) a. som\textsubscript{sak\textsubscript{2}} ca\textsubscript{2} pen\textsubscript{1}
    Somsak PROS COP phuu\textsubscript{phi\textsubscript{4}phaak\textsubscript{5}} saa\textsubscript{5}
    judge
    nay\textsubscript{1} ?iik\textsubscript{2} sc\textsubscript{3} pii\textsubscript{1}
    in more two year
    “Somsak will be a judge in two years.”

b. som\textsubscript{sak\textsubscript{2}} pen\textsubscript{1}
    Somsak COP phuu\textsubscript{phi\textsubscript{4}phaak\textsubscript{5}} maa\textsubscript{1} sc\textsubscript{3} pii\textsubscript{1}
    judge PERF\textsuperscript{19} two
    pii\textsubscript{1} leew\textsubscript{4}
    year PERF
    “Somsak has been a judge for two years.”

(24) a. *som\textsubscript{sak\textsubscript{2}} ca\textsubscript{2} kh\textsubscript{1}
    Somsak PROS COP phuu\textsubscript{phi\textsubscript{4}phaak\textsubscript{5}} saa\textsubscript{5} nay\textsubscript{1} ?iik\textsubscript{2}
    judge in more
    sc\textsubscript{3} pii\textsubscript{1}
    two year
    “Somsak will be a judge in two years.”

b. *som\textsubscript{sak\textsubscript{2}} kh\textsubscript{1} phuu\textsubscript{phi\textsubscript{4}phaak\textsubscript{5}} saa\textsubscript{5}
    Somsak COP judge
    maa\textsubscript{1} sc\textsubscript{3} pii\textsubscript{1} leew\textsubscript{4}
    PERF two year PERF
    “Somsak has been a judge for two years.”

\textsuperscript{19} 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 pen₁ allow these adverbial modifications while the copula khūṭ₁ does not, it follows that the copulas be and pen₁ convey the sense of performing while the copula khūṭ₁ 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 pen₁ and khūṭ₁ 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. mua₁ kcoṇ₂ som sak₂ pen₁ when before Somsak COP rat₂tha₃mon₁trii₁ krasuay₁ka₁set₂ the Minister of Agriculture
   “In the past Somsak was the Minister of Agriculture.”

b. mua₁ kcoṇ₂ som sak₂ khūṭ₁ when before Somsak COP rat₂tha₃mon₁trii₁ krasuay₁ka₁set₂ 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 pen₁ can occur with adverbial phrases indicating a particular point of time, the copula khūṭ₁ cannot, as shown in (27) and (28).

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

(28) a. som sak₂ pen₁ rat₂tha₃mon₁trii₁ Somsak COP minister tcoon₁ ‘aa₁yuʔ₁ 55 pii₁ when age 55 year
   “Somsak was a minister when he was 27 years old.”

b. *som sak₂ khūṭ₁ rat₂tha₃mon₁trii₁ Somsak COP minister tcoon₁ ‘aa₁yuʔ₁ 55 pii₁ 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 pen₁ allow
Aspectsual Properties and Polarity-sensitivity of Copulas pen₁ and khun₁ in Thai

this kind of adverbial modification while the copula khun₁ does not, it follows that the copulas be and pen₁ are associated with a sense of transition whereas the copula khun₁ is not.

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 Visonyanggoon 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 day₃ can be interpreted in many ways. It can function as a perfective marker and also a modal for permission and ability (Visonyanggoon 2000). Functioning as a modal for permission and ability, the
word \textit{day} can occur with the copula \textit{pen}, but it cannot occur with the copula \textit{kh\textsubscript{u}u\textsubscript{t}}, as demonstrated in (30)\textsuperscript{21}.

(30) a. \textit{som\textsubscript{5}sak\textsubscript{2} day\textsubscript{3} pen\textsubscript{1}}
    Somsak \textsc{abil/perm} \textsc{copp}
    tua\textsubscript{1}the\textsubscript{en\textsubscript{1}} \textit{bo\textsubscript{3}ri\textsubscript{1}sat\textsubscript{2}}
    representative company
    “Somsak can be the company’ representative.”

b. *\textit{som\textsubscript{5}sak\textsubscript{2} day\textsubscript{3} kh\textsubscript{u}u\textsubscript{t}}
    Somsak \textsc{abil/perm} \textsc{copp}
    tua\textsubscript{1}the\textsubscript{en\textsubscript{1}} \textit{bo\textsubscript{3}ri\textsubscript{1}sat\textsubscript{2}}
    representative company
    “Somsak can be the company’ representative.”

Since the copula \textit{kh\textsubscript{u}u\textsubscript{t}} behaves like the copula \textit{be} in (29a) whereas the copula \textit{pen}, behaves like the copula \textit{be} in (29b), it can be concluded that the copula \textit{pen} has the flavor of an eventive verb whereas the copula \textit{kh\textsubscript{u}u\textsubscript{t}} does not.

4.3.2 The progressive marker

In English the form \textit{be}…\textit{-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 \textit{be}…\textit{-ing} can co-occur with the phasal adverb \textit{still} (e.g., \textit{John was still building a house. John was still eating an apple.}) The form \textit{still}…\textit{-be-ing} is usually limited to eventive verbs. As expected, the copular verb \textit{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 \textit{ya\textsubscript{j}} and \textit{yu\textsubscript{t}}, respectively. Like those in English, these two elements may co-occur. Crucially, the copula \textit{pen} can occur with \textit{ya\textsubscript{j}}…\textit{yu\textsubscript{t}} but the copula \textit{kh\textsubscript{u}u\textsubscript{t}} cannot, as demonstrated in (34).

(34) a. \textit{som\textsubscript{5}sak\textsubscript{2} ya\textsubscript{j} pen\textsubscript{1}}
    Somsak \textsc{cont}\textsuperscript{23} \textsc{copp}
    kha\textsubscript{1}na\textsubscript{2}ba\textsubscript{1}di\textsubscript{1} yu\textsubscript{2}
    dean \textsc{prog}
    “Somsak is still the dean.”

b. *\textit{som\textsubscript{5}sak\textsubscript{2} ya\textsubscript{j} kh\textsubscript{u}u\textsubscript{t}}
    Somsak \textsc{cont} \textsc{copp}
    kha\textsubscript{1}na\textsubscript{2}ba\textsubscript{1}di\textsubscript{1} yu\textsubscript{2}

\textsuperscript{21} In the same way that the copula \textit{kh\textsubscript{u}u\textsubscript{t}} does not allow a modal for permission and ability (\textit{day}), it does not allow other modals including modals for probability (\textit{kh\textsubscript{j}t\textsubscript{j} and na\textsubscript{2}ca\textsubscript{2}}) and obligation (\textit{ca\textsubscript{2}}).

\textsuperscript{22} \textsc{abil/perm} stands for a marker for \textsc{ability/permission}.

\textsuperscript{23} \textsc{cont} stands for a marker for \textsc{continuative}.
Aspectual Properties and Polarity-sensitivity of Copulas pen₁ and khụ́₁ in Thai

“Somsak is still the dean.”

In (34a) and (34b), since the copula pen₁ can occur with the markers for phases of continuation and progressiveness whereas the copula khụ́₁ cannot, it can be concluded that the copula pen₁, compared with the copulas khụ́₁, 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 pen₁ and khụ́₁ 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 pen₁ 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
- ✓ occurring in the progressive form

The copula khụ́₁ 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 pen₁ is found to be a copula with the semantic of [-stativity]. The copula khụ́₁, on the other hand, is a copula with the semantic feature of [+stativity]. The copula be is found to be in between pen₁ and khụ́₁ but nevertheless behaves more like pen₁ than khụ́₁.

Since the copula khụ́₁, which is polarity-sensitive, differs from the copulas pen₁ 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 khụ́₁ 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  khun1  involves stativity, whereas the copula  pen1  is associated with eventive meaning. Therefore, the copulas  khun1  and  pen1  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  pen1  is a verbal copula, its co-occurrence with a negator (i.e.,  may3 day3  or  may3 chay3) is predicted to be grammatical. On the other hand, as  khun1  is a non-verbal copula, it cannot be negated like a verb. The co-occurrence of  khun1  with any verbal negators, therefore, causes ungrammaticality. As a result, while the copula  pen1  behaves like a PII, the copula  khun1  behaves like a PPI.

The idea that  pen1  is a copula with verbal properties while  khun1  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  pen1  is more or less like verb and it is considered to be a semi-verbal. The word  khun1,  on the other hand, behaves more like a linker rather than a verb. The word  khun1  introduces a designator with a meaning similar to ‘in other words,’ or ‘that is’ in English. Moreover, they also note that  khun1  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  pen1  and  khun1  in Thai. Based on the observation that the copula  khun1  only occurs in a positive environment whereas the copula  pen1  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 pen₁ and khūn₁ as verb and non-verb, respectively. What possibly makes pen₁ a verb and khūn₁ 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 pen₁ and khūn₁, 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 pen₁ is considered to be a verbal copula but khūn₁ 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


