

# The (Non-) Progressive in Thai\*

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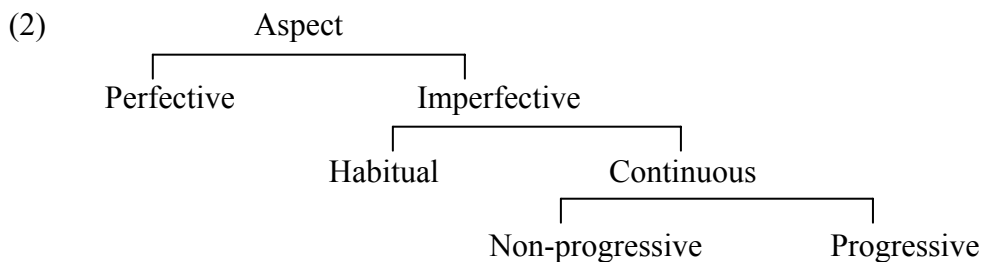
The lexical meanings of *klaml3ang* and *y3u:I* are readily clear: ‘strength’ and ‘stay’, respectively. But when the two behave like auxiliaries, their semantics is not as transparent. They have been treated as both temporal markers conveying the present time and aspect markers specifying progressiveness, continuation, and imperfectivity. In this essay, the proposal that they express the time coterminous with the utterance time is refuted. Looking at their occurrences in ordinary language use, with aspectual verb types and temporal measure adverbs taken into consideration, it is found that *klaml3ang* and *y3u:I* are better seen as aspect markers conveying progressiveness and non-progressiveness, respectively. This analysis is based on their co-occurrences and non-occurrences with particular aspectual types of verbs and temporal measure adverbs. To represent *klaml3ang* and *y3u:I* in Discourse Representation Theory, the aspectual operator PROG may be applied to the predicate.

## 1 INTRODUCTION

Out of context, *klaml3ang*<sup>1</sup> and *y3u:I* are typically thought of as an abstract noun and a location verb with lexical meanings of ‘strength’ and ‘stay’, respectively. Nevertheless, there are other uses of *klaml3ang* and *y3u:I*, where they appear auxiliary-like. In these uses, *klaml3ang* immediately precedes verb phrases, *y3u:I* comes right after verb phrases, and they may also co-occur. Possible constructions thus include the following:

- (1) (a) *klaml3ang* VP
- (b) VP *y3u:I*
- (c) *klaml3ang* VP *y3u:I*

From Bybee et al.’s (1994) remark that grammatical markings for the progressive aspect derive most frequently from locative constructions and tend to evolve as imperfective markers, it is expected that *y3u:I*, a location verb meaning ‘stay’ is a progressive/imperfective marker in Thai when it behaves like an auxiliary. As *klaml3ang*, though an abstract noun whose meaning does not remotely concern location, usually occurs with *y3u:I* when it is an auxiliary, it is highly likely that it is a progressive/imperfective marker in Thai, too. However, it is necessary to point out that the progressive/imperfective distinction may not be an appropriate one if we look at the aspectual contrasts presented in Comrie (1976:25) below.



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<sup>1</sup> The Thai transliteration system used here is that which is found in Diller (1996).

Imperfective is defined as a property of an eventuality whose internal temporal structure is referred to, habitual concerns a property of an eventuality characteristic of a long period, continuous is durative, and progressive means in progress while non-progressive concerns a more permanent eventuality. (3) – (5) are examples of how habitual, progressive and non-progressive are standardly rendered in English, respectively.

- (3) He used to sit in front of the house every evening.
- (4) He is sitting in front of the house now.
- (5) He sits on the committee of Ministry of Environment.

It is easily seen from (2) that progressiveness is a type of continuation and both belong to the imperfective aspect. As such, it is apparently not fruitful to discuss whether a particular linguistic element is a marker of the progressive and/or imperfective aspects. For example, if *klaml3ang* and *y3u:I* express progressiveness, that means they express continuation and imperfectivity, too. In my view, the only interesting aspectual distinction to look at as far as the two are concerned is progressiveness and non-progressiveness.

This study is an attempt to analyse the semantics of the auxiliary-like items *klaml3ang* and *y3u:I* and propose that they express aspect rather than temporality, as they are sometimes claimed to do. Both *klaml3ang* and *y3u:I* are claimed to convey both the present time and various types of aspectual information, progressiveness, continuation, and imperfectivity. However, it will be shown that (i) the present time is not encoded by *klaml3ang* and *y3u:I* but is simply their default interpretation when there is no cancellation, (ii) the two can combine jointly or separately with certain aspectual types of verbs but not the others, and (iii) only *y3u:I*, but not *klaml3ang*, may co-occur with temporal measure adverbs. These observations strongly support that *klaml3ang* and *y3u:I* are better analysed as aspect markers, and not present time markers, and that the aspectual information they convey is not the same.

The paper is organised as follows. First, I mention and assess previous treatments of *klaml3ang* and *y3u:I*. It will become clearer that these accounts are less than adequate when I then present my analysis of *klaml3ang* and *y3u:I* as aspectual and not temporal markers and discuss how they may be represented in Discourse Representation Theory. My conclusions are as follows. The markers *klaml3ang* and *y3u:I* can both be found with all the durative verbs types, i.e. activity and accomplishment verbs, semelfactives, and state verbs of both temporary and permanent nature, but not nearly instantaneous ones such as punctual and slow-motion achievements. Only *klaml3ang*, and not *y3u:I*, can co-occur with punctual achievements in the presence of the modal marker *cla* whereas only *y3u:I*, and not *klaml3ang*, can be used with slow-motion achievements. Besides, as mentioned earlier, only *y3u:I*, and not *klaml3ang*, is compatible with temporal measure adverbs. These seem to strongly suggest that *klaml3ang* and *y3u:I* express the durative or continuous aspect, where *klaml3ang* is more temporary (progressive) while *y3u:I* is more permanent (non-progressive). When they co-occur, as in (1c), the progressive of *klaml3ang* overrides the non-progressive of *y3u:I*.

## 2. PREVIOUS TREATMENTS OF *KLAML3ANG* AND *Y3U:I*

*Klaml3ang* and *y3u:I* are analysed as both temporal and aspect markers, conveying the present time and the progressive, continuous, and imperfective aspects. Therefore, it is now necessary to define these terms in more detail. The progressive aspect refers to a property of an eventuality that is in progress at a point in time for a limited temporal duration. The continuous aspect involves a property of a durative eventuality that continues unbroken for a period of time. The continuous aspect is different from the progressive aspect in that the former may be of less temporary, more permanent nature, in which case, it is called the non-progressive aspect. Continuation give rise to an implication that an eventuality has taken

place before, is continuing at, and will end after a relevant reference time. Lastly, the imperfective aspect is most general of all as it includes properties of (i) an eventuality that occurs over an extended period of time and (ii) a habitual eventuality that occurs on multiple occasions with no implication of a beginning or an end.

## 2.1 Present time markers

According to Scovel (1970), *klaml3ang* is the present time marker in Thai, which can occur alone before a verb phrase and may be accompanied by *y3u:I*, which he identifies as the present time/aspect marker encoding continuation and progressiveness as well as the present time. Although the meanings of continuation or progressiveness are possibly expressed in the presence of *klaml3ang* and in the absence of *y3u:I*, Scovel (1970: 84) reasons, *klaml3ang* is best considered as conveying the present time in Thai because (i) “no other preverbs<sup>2</sup> mark the time coterminous with the moment of utterance as clearly” as *klaml3ang* and (ii) *klaml3ang* “is never used with” *kh3oe:y* and *cla*, which, in his approach, are specified as the past time marker and the future time marker in Thai, respectively<sup>3</sup>.

Scovel’s analysis (1970: 84) seems to be based on the assumption that in any language there has to be at least one linguistic element that immediately precedes verb phrases (i.e. his ‘preverb’) and that clearly marks “the time coterminous with the moment of utterance”. On virtually no grounds can the assumption be regarded as valid. If a language is required to have an element that marks the utterance time at all, it does not necessarily occur right before a verb phrase. Incidentally, in Thai, there are quite a few expressions that impart the concept of NOW, such as *dliawn3i:II*, *tlo’:nn3i:II*, and *kh2an3an3iII*. Moreover, in contrast to his claim, *klaml3ang* and *cla* can be used together, as in (6).

- (6)    r3aw    klaml3ang    cla    klin    ’1a:h2a:n    cli:n  
        we        *klaml3ang*    *cla*    eat    food        Chinese

We are/were about to eat Chinese food.

In this relation, Scovel (1970: 84) explains that *klaml3ang* and *cla* are used metaphorically and that “the two syntactic time words co-occur because of the proximity of the two differing semantic times being referred to”. This also seems to be an unfounded explanation. Intuitively, there is nothing metaphorical about (6). On the contrary, *klaml3ang* and *cla*, juxtaposed as in (6), compositionally indicate that the possibility of an eventuality is in progress at a relevant reference time, which may be the utterance time or a time prior to the utterance time.

## 2.2 Continuous aspect markers

Another analysis along Scovel’s line (1970), though less explicit, is Kanchanawan (1978), where *klaml3ang* and *y3u:I* are treated as continuous aspect markers. Kanchanawan (1978: 83) specifies that *klaml3ang* indicates “the process of doing something or being in some state” and that *y3u:I* indicates that “the event stays that way”. Although, unlike Scovel (1970), she does not lucidly say that *klaml3ang* and *y3u:I* express the present time, it seems clear that this is probably what she has in mind when she explains that “sentences with a continuous marker are in present continuous” (Kanchanawan 1978: 139). That is, an

<sup>2</sup> ‘Preverb’ is Scovel’s term for auxiliary-like elements that syntactically occur immediately before a verb or a verb phrase.

<sup>3</sup> I argue that *kh3oe:y* (Srioutai, unpublished) and *cla* (Srioutai, forthcoming) are not temporal markers but aspect and modal markers, respectively.

utterance with either or both of what she calls continuous aspect markers, which are *klaml3ang* and *y3u:I*, describes an eventuality that is going on uninterruptedly at the utterance time. From this explanation, even if she does not spell out that *klaml3ang* and *y3u:I* are present time markers in Thai, she appears to think that they express both the continuous aspect and the present time. However, elsewhere (Kanchanawan 1978: 102-115 and 119, and 1978: 115-118) she describes that *klaml3ang* and *y3u:I* can co-occur with past temporal adverbs and future temporal adverbs and that, in these cases, they, jointly or separately, express the continuous aspect in the past and future, respectively. Therefore, it seems reasonable to conclude that, in Kanchanawan (1978), *klaml3ang* and *y3u:I* express the continuous aspect that comes by default with the present time interpretation, which in turn can be cancelled by the presence of past or future temporal adverbs in the utterance.

I agree with Kanchanawan (1978) that *klaml3ang* and *y3u:I* are continuous aspect markers. However, although Kanchanawan also classifies the two as continuous aspect markers, she does not make it clear what semantic contributions they have on their own and how their semantics interact when they co-occur with each other. These are two points that I add to her analysis. In brief, *klaml3ang* expresses progressive and *y3u:I* indicates non-progressive; when they co-occur, the meaning of *klaml3ang* overrides that of *y3u:I*. This is discussed in Section 3.

### 2.3 Progressive/imperfective markers

Other treatments of *klaml3ang* and *y3u:I* reviewed here agree that they impart aspectual, and not temporal, information although they differ in some detail. It is clear from the diagram in (2) that these accounts are less than adequate as they argue that *klaml3ang* and/or *y3u:I* express progressive, continuous or imperfective instead of the interesting distinction, progressive and non-progressive, as mentioned in Section 1.

Supanvanich (1973) does not make it clear what function *klaml3ang* and *y3u:I* perform. What she does is to show how temporal and aspectual information may be expressed in Thai by a combination of verbs and/or other word classes such as what she calls auxiliaries and temporal adverbials. These words and expressions are simply listed with no semantic explanations given. However, *klaml3ang* and *y3u:I* appear on the list of necessary elements in progressive constructions and *y3u:I* also appears on the list of necessary elements in continuous ones, regardless of whether the eventuality described takes place ahead of, at the same time as, or subsequent to the utterance time. It can thus be deduced from these facts that, in Supanvanich's approach (1973), *klaml3ang* and *y3u:I* are progressive markers while *y3u:I* is a continuous marker, too. A discernible weakness is that Supanvanich (1973) does not make it clear when *y3u:I* marks the progressive or continuous aspects. Bearing in mind Comrie's aspectual distinctions (1976: 25), where progressive is classed as a type of continuous, it might even be unfeasible to do so since by definition whatever expresses progressive expresses continuous.

Meepoe (1998) identifies *klaml3ang* and *y3u:I* as temporal aspect markers, where *klaml3ang* is a progressive marker and *y3u:I* is progressive/imperfective marker in her framework. Like Supanvanich (1973), Meepoe (1998) makes an aspectual distinction that is arguably minimally existent. Again, this is because a linguistic item that conveys progressive conveys imperfective by definition. In Muansuwan's analysis (2000), *klaml3ang* and *y3u:I* are aspect morphemes, where the former marks the progressive aspect while the latter encodes the imperfective aspect. While this seems to distinguish *klaml3ang* and *y3u:I*, it does not for the same fact that there is no clear-cut distinction between progressive and imperfective. It will be seen that the differences in these accounts are in fact a matter of unfounded speculation, imprecise terminology, theoretical assumption, and insufficient data.

To sum up, in the previous approaches presented, *klaml3ang* is considered a present time marker, continuous aspect marker, and progressive marker, and *y3u:I* is treated as a

present time/progressive aspect marker, continuous marker, progressive marker, and imperfective marker. There are several reasons why it is possible to arrive at such different accounts of the two. First of all, as none of them offer precise definitions for various terms used, it is expected that there might be some terminological confusions. A case in point is Supanvanich's (1973) continuous aspect. From her proposal that there are 17 of what she calls tenses in Thai, it is likely that she depends heavily on the pedagogical tense system of English as taught in most English classes of her time, where the *be + verb-ing* form was then named 'continuous tense'. This seems to explain why the term 'continuous' is used when instead it is quite probable that what she means in fact is progressive or non-progressive. Another problem appears to involve an invalid assumption. As mentioned earlier, Scovel (1970) evidently wrongly assumes that there has to be a linguistic element that comes right before a verb phrase that marks the present time and, hence, takes it for granted that *klaml3ang* is the present time marker in Thai, a position to be refuted in Section 3.1. Considering Kanchanawan's (1978) discussion about how the present time interpretation of *klaml3ang* and *y3u:I* is absent in the presence of past and future temporal adverbs, it may not be too far-fetched to say that Scovel's (1970) wrong assumption might primarily result from an insufficiency of data, in which no such temporal adverbs co-occur with the two. This same reason may be pertinent to differences in the treatments of *y3u:I* as a progressive marker and/or an imperfective marker in the various accounts here. For instance, it might be that Muansuwan (2000) looks at the occurrences of *y3u:I* where it seems to generally express imperfective while in Meepoe's (1998) corpus there are occasions on which *y3u:I* specifically marks the progressive aspect, too, regardless of the fact that progressive is also imperfective by definition. Another possible explanation for differing claims concerning what aspects *klaml3ang* and *y3u:I* express is lack of adequate attention paid to the aspectual types of verbs and temporal measure adverbs. The typology of verbs and temporal measure adverbs will prove significant to the meanings the two express, the issue that we turn to in Sections 3.2 and 3.3. In the following section, it is shown that *klaml3ang* and *y3u:I* do not encode the present time and thus are not present time markers.

### 3. *KLAML3ANG* AND *Y3U:I*: MARKERS OF ASPECTUALITY

Evidence is given in favour of the analysis of *klaml3ang* and *y3u:I* as aspect markers in this section. I first give counter-examples to Scovel's (1970) analysis of the two as present time markers, and then argue that the present time is not encoded by *klaml3ang* and *y3u:I* but is simply their default interpretation when nothing in the utterance cancels it. The fact that they can co-occur together or separately rather freely with durative aspectual types of verbs but not punctual and slow-motion achievements strongly suggests they are better treated as aspect markers as the aspectual types of verbs seem to interact with the grammatical aspects expressed by either or both of the two. I also demonstrate that the different aspectual meanings *klaml3ang* and *y3u:I* express become clear when we take a closer look at temporal measure adverbs they can or cannot combine with. That is, the former is a progressive marker where the latter is a non-progressive marker. It will also be shown that when they co-occur, the progressive meaning of *klaml3ang* overrides the non-progressive meaning of *y3u:I*.

#### 3.1 *Klaml3ang* and *y3u:I*: markers of presentness?

Counter-examples can easily be found to prove against the analysis of *klaml3ang* and *y3u:I* as markers of presentness in Thai. Consider (7) – (9).

- (7) (a) k1r3eml3in k1aml3ang c1ap ng3u:  
Gremlin *klaml3ang* catch snake

- (b) k1r3eml3in c1ap ng3u: y3u:I  
Gremlin catch snake y3u:I
- (c) k1r3eml3in k1aml3ang c1ap ng3u: y3u:I  
Gremlin k1aml3ang catch snake y3u:I

Gremlin is catching a snake.

In (7), *k1aml3ang* and/or *y3u:I* seem have present time reference. No matter whether they appear separately, as in (7ab) or jointly, as in (7c), they seem to locate the eventuality described at the utterance time. However, I propose that the apparent present temporal meaning of *k1aml3ang* and/or *y3u:I* is merely their default reading, which can be cancelled by context, as seen for instance in (8) and (9).

- (8) (a) k1r3eml3in k1aml3ang c1ap ng3u: t1o':nch3awII m3u'aIw3a:nn3i:II  
Gremlin k1aml3ang catch snake morning yesterday
- (b) k1r3eml3in c1ap ng3u: y3u:I t1o':nch3awII m3u'aIw3a:nn3i:II  
Gremlin catch snake y3u:I morning yesterday
- (c) k1r3eml3in k1aml3ang c1ap ng3u: y3u:I t1o':nch3awII m3u'aIw3a:nn3i:II  
Gremlin k1aml3ang catch snake y3u:I morning yesterday

Gremlin was catching a snake yesterday morning.

- (9) (a) k1r3eml3in k1aml3ang c1ap ng3u:  
Gremlin k1aml3ang catch snake
- t1o':n ch2an k1l3ap th2u'ng b1a:nII  
when I arrive at home
- (b) k1r3eml3in c1ap ng3u: y3u:I  
Gremlin catch snake y3u:I
- t1o':n ch2an k1l3ap th2u'ng b1a:nII  
when I arrive at home
- (c) k1r3eml3in k1aml3ang c1ap ng3u: y3u:I  
Gremlin k1aml3ang catch snake y3u:I
- t1o':n ch2an k1l3ap th2u'ng b1a:nII  
when I arrive at home

Gremlin was catching a snake when I arrived home.

My argument in the framework of Default Semantics (Jaszczolt, forthcoming) is this. The default readings of *k1aml3ang* and/or *y3u:I* are cognitive defaults, defined as default interpretations arising out of the properties of the mental states that underlie the process of linguistic communication. Mental states are intentional. Intentionality can be weaker or stronger, and the strongest intentionality is the norm, or default. Since it is assumed that there are mental states that underlie utterances, utterances are intentional, too. Default mental states then correspond to default interpretations of utterances, reflecting the strongest referring or

intending by corresponding utterances. While the speaker of (7) more informatively refers to an eventuality of Gremlin's catching a snake at the utterance time, as the default interpretations of *k1aml3ang* and/or *y3u:I* are not cancelled, what the speaker of (8) and (9) has in mind is the eventuality of Gremlin's catching a snake before the utterance time. That is, the communicative, informative and referential intentions, recognised in Default Semantics, of utterances with *k1aml3ang* and/or *y3u:I*, as in (7), are stronger than those in (8) and (9). The readings of *k1aml3ang* and *y3u:I* in (7) are thus their default interpretations.

That is to say, to pin down exactly where the eventuality is to be put on the time line, prior to or at the utterance time, *k1aml3ang* and/or *y3u:I* are of limited assistance. We need to look elsewhere for confirmation concerning temporal location of the eventuality described. The possibility of *k1aml3ang* and *y3u:I* encoding the present time has thus been ruled out. In the next section I discuss their co-occurrences and non-occurrences with different aspectual types of verbs to provide another argument in support of their treatment as aspect markers.

### 3.2 Co-occurrences of *k1aml3ang* and *y3u:I* with aspectual types of verbs

There are two foremost sources of aspectuality in a sentence. Apart from grammatical aspects conveyed by such aspect markers as the progressive *be + verb-ing* form in English, there is primarily another source of aspectual information because verbs also come with their own inherent lexical aspectual meanings. Not surprisingly, the two main sources of aspect interact with each other, resulting in the fact that some combinations of certain aspects and particular aspectual classes of verbs do not occur. Therefore, if *k1aml3ang* and *y3u:I* are aspect markers, it is expected that they may not co-occur with specific aspectual types of verbs. It is thus worth mentioning a number of aspectual typologies of verbs before resuming more discussion on the semantics of *k1aml3ang* and *y3u:I*.

Two major aspectual typologies of verbs in English are offered in Vendler (1967) and Dowty (1986). While the former takes the basic unit of time to be an instant, in the latter analysis, it is seen as an interval. Vendler (1967: 106) classifies English verbs into four aspectual classes. They are activities, accomplishments, achievements and states. The first two can take what is traditionally called the continuous verb form, i.e. the *be + verb-ing* form, and the last two cannot. Their definitions are given in (10).

- (10) (a) *A was running at time t* means that time instant *t* is on *a* (not unique or definite) time stretch throughout which *A* was running. The verb to *run* is an activity verb.  
 (b) *A was drawing a circle at t* means that *t* is on *the* (unique and definite) time stretch in which *A* drew that circle. The verb to *draw a circle* is an accomplishment verb.  
 (c) *A won a race between t1 and t2* means that *the* (unique and definite) time instant at which *A* won that race is between *t1* and *t2*. The verb to *win the race* is an achievement verb.  
 (d) *A loved somebody from t1 to t2* means that at *any* (indefinite and non-unique) instant between *t1* and *t2* *A* loved that person. The verb to love somebody is a state verb.

It goes without saying that achievement and state verbs, as mentioned earlier, do not take the continuous verb form, because the verb types are incompatible with the verb forms by definition. The instant at which an eventuality described by an achievement verb takes place is unique and definite and so contradicts progressive meaning conveyed by the continuous verb forms. As an eventuality described by a state verb is intrinsically durative, there is presumably no need for the continuous verb forms to grammatically mark the progressive aspect there.

Unlike Vendler, Dowty (1986) assumes that, as every event has some duration, the basic unit of time is an interval. The three aspectual classes of verbs presented in Dowty

(1986: 42) are statives, activities, and accomplishments/achievements. Their definitions and examples are given in (11).

- (11) (a) A sentence  $\phi$  is stative if and only if it follows from the truth of  $\phi$  at an interval  $I$  that  $\phi$  is true at all subintervals of  $I$ . If John was asleep from 1:00 until 2:00 pm, then he was asleep at all subintervals of this interval; *be asleep* is a stative.  
 (b) A sentence  $\phi$  is an activity (or *energeia*) if and only if it follows from the truth of  $\phi$  at an interval  $I$  that  $\phi$  is true of all subintervals of  $I$  down to a certain limit in size. If John walked from 1:00 until 2:00 pm, then most subintervals of this time are times at which John walked; *walk* is an activity.  
 (c) A sentence  $\phi$  is an accomplishment/achievement (or *kinesis*) if and only if it follows from the truth of  $\phi$  at an interval  $I$  that  $\phi$  is false at all subintervals of  $I$ . If John built a house in exactly the interval from September 1 until June 1, then it is false that he built a house in any subinterval of this interval; *build a house* is an accomplishment/achievement.

Dowty deliberately makes no distinction between Vendler's accomplishments and achievements. The reason for this is that he does not agree with the difference between them, which is based on the often-suggested fact that accomplishments are durative while achievements are punctual. Dowty (1986:42) contends that eventualities usually labelled achievements such as dying or reaching a finish line actually have some duration.

While I find Dowty's definitions more precise and systematic, it seems that the line should be drawn between accomplishments and achievements at least in Thai, if not also in English, as prototypical members of the two verb classes apparently behave in a different way in relation to *klaml3ang* and *y3u:I*, as will be shown below. Besides, if eventualities described by achievement verbs can be said to be punctual, i.e. "taking place at an undivided moment in time" (Matthews 1997), then a basic unit of time to accommodate a punctual eventuality should be an instant. This is because it seems simpler than it would be if an interval was taken to be basic and had to be broken down for an eventuality described by an achievement verb to occur. However, there are drawbacks with conceptualising a basic unit of time in terms of an instant. As pointed out by Dowty (1979: 137-8), there is a limitation in taking the notion of the truth of a sentence at an instant as basic since in that case an interval sentence is true only when each of its embedded sentences is true at all instants in that interval. While this seems adequate for a sentence with state verbs, it is not applicable when an accomplishment sentence is true of an interval greater than an instant. Taking an interval-based semantics, an interpretation could be allowed to assign a truth value to an accomplishment sentence at subintervals within an interval independently of the truth value of the sentence for the whole interval. Therefore, it is more appropriate to take the view of the truth of a sentence at an interval as primitive. For all these reasons, the co-occurrences of *klaml3ang* and *y3u:I* with aspectual verb types are discussed on the assumptions that (i) there are four aspectual types of verbs activities, accomplishments, achievements, and states, (ii) the basic unit of time is an interval, and (iii) Vendler's (1967) verb typology, originally offered for English, can extend to Thai, too.

Scovel (1970), Kanchanawan (1978), and Muansuwan (2000) all touch upon the collocations and interactions of *klaml3ang* and *y3u:I* and aspectual verb types. Considering the fact that he treats *klaml3ang* and *y3u:I* as two morphemes conveying the present time in Thai, it does not appear consistent that Scovel (1970) should remark that they are bound to "commonly" or "less commonly" combine with particular aspectual classes of verbs. The reason for this seems to be that an eventuality of any type can potentially occur anywhere on the time line, whether it is prior to, at the same time as, or subsequent to the utterance time, or the present moment. Therefore, if *klaml3ang* and *y3u:I* mark the present time in Thai, they should freely combine with any aspectual class of verbs. In any case, Scovel maintains that

“it is much less common to find *klaml3ang* used with” state verbs than with activity ones (1970:85), and that *y3u:I* seems to be restricted in its usage – “occurring only with” activity verbs and “almost never with” accomplishment, achievement, and state verbs (1970: 94). At this point, it seems sensible to say that Scovel’s account of *klaml3ang* and *y3u:I* is unsupported at best. There is virtually no reason why only eventualities classed as activities should normally take place in the present time while accomplishments, achievements, and states less normally do so. In fact, as will be seen later on, *klaml3ang* and *y3u:I* can combine with all aspectual types of verbs except two subtypes of achievements, namely punctual achievements and slow-motion achievements.

Since the other two accounts treat *klaml3ang* and *y3u:I* as aspect markers, it is not surprising that they come with certain forms of observations on their co-occurrences with aspectual verb types as lexical and grammatical aspects are expected to interact. Kanchanawan (1978: 83) rightly asserts that *klaml3ang* and *y3u:I* may be used with a state verb to put emphasis on it and that their co-occurrences with an achievement verb are blocked because the “being in the process of something” sense of *klaml3ang* and *y3u:I* and the “having no duration” nature of an achievement verb are incompatible. It will be seen, however, that more can be said about the relations between *klaml3ang* and *y3u:I* and achievement verbs, which is also telling about the semantics of the two (see Section 3.3.2). According to Muansuwan, *klaml3ang* can combine with activity, accomplishment, and certain temporary state verbs (2000:103) whereas *y3u:I* can co-occur with activity, accomplishment, and state verbs (2000: 131). Both *klaml3ang* and *y3u:I*, she adds, can be used with achievement verbs that are coerced to receive an iterative interpretation such as knocking, and *klaml3ang* can combine with what Sookgasem (1990) calls “extended achievement verbs” such as arriving. Muansuwan (2000: 120-121) also hypothesises that a continuum of degree of permanence of state verbs affects their interactions with *klaml3ang* and *y3u:I* in such a way that the less temporary it is, the more unlikely a particular state verb is to be combined with *klaml3ang*. All her claims apart from those about state verbs and “extended achievement verbs” are found to be correct. In fact, state verbs are observed to combine fairly freely with *klaml3ang* and *y3u:I*, no matter how temporary or permanent they are (see Section 3.3.3), and “extended achievement verbs” cannot be used with *klaml3ang* unless the modal *clā* is also present (see Section 3.3.2.2). In short, the descriptions of the co-occurrences of *klaml3ang* and *y3u:I* with aspectual types of verbs in the previous accounts do not quite match actual uses or can be said to be comprehensive. It will become clear in the following section that the two can co-occur with all the other aspectual types of verbs except for punctual and slow-motion varieties of achievement verbs, where the former may only combine with *klaml3ang* in the presence of *clā* and the latter may only co-occur with *y3u:I*, and not *klaml3ang*.

### 3.3 The semantics of *klaml3ang* and *y3u:I* as aspect markers

The summary so far is this. It has been shown by counter-examples (7) – (9) in Section 3.1 that *klaml3ang* and *y3u:I* do not encode the present time. Apparently, certain restrictions on their co-occurrences with particular aspectual verb types seem to reflect that *klaml3ang* and *y3u:I* express grammatical meanings of aspect, which interact with lexical aspects inherently in verbs. This strongly points to the fact that they are better analysed as aspect markers. The next move is to explore what aspectual meanings they express. Let us now look at what *klaml3ang* and *y3u:I* express, jointly or in separation, when they combine with each of Vendler’s aspectual verb types (1967), as outlined below. Note that only the default interpretations of all examples in this section are given in the glosses as the exact temporal location of the eventualities described by the utterances is not relevant to the discussion of the aspectual meanings of *klaml3ang* and *y3u:I*.

3.3.1 *Activity and accomplishment verbs*

When *klaml3ang* and *y3u:I* co-occur with activity and accomplishment verbs, it seems clear that the aspect conveyed is progressive; the described eventuality is in progress at a relevant reference time point. That is, (12abc) apparently share similar or even the same meaning, and the same can be said about (13abc).

- |      |     |                               |                               |                       |                       |
|------|-----|-------------------------------|-------------------------------|-----------------------|-----------------------|
| (12) | (a) | ch3a:wp1r3am3ong<br>fisherman | klaml3ang<br><i>klaml3ang</i> | h2a:p1l3a:<br>fish    |                       |
|      | (b) | ch3a:wp1r3am3ong<br>fisherman | h2a:p1l3a:<br>fish            | y3u:I<br><i>y3u:I</i> |                       |
|      | (c) | ch3a:wp1r3am3ong<br>fisherman | klaml3ang<br><i>klaml3ang</i> | h2a:p1l3a:<br>fish    | y3u:I<br><i>y3u:I</i> |

The fisherman is fishing.

- |      |     |                        |                               |                   |                       |                       |
|------|-----|------------------------|-------------------------------|-------------------|-----------------------|-----------------------|
| (13) | (a) | kh3onng3a:n<br>workman | klaml3ang<br><i>klaml3ang</i> | s3o':mI<br>repair | th2an3on<br>road      |                       |
|      | (b) | kh3onng3a:n<br>workman | s3o':mI<br>repair             | th2an3on<br>road  | y3u:I<br><i>y3u:I</i> |                       |
|      | (c) | kh3onng3a:n<br>workman | klaml3ang<br><i>klaml3ang</i> | s3o':mI<br>repair | th2an3on<br>road      | y3u:I<br><i>y3u:I</i> |

The workmen are repairing the road.

3.3.2 *Achievement verbs*

With achievement verbs, *klaml3ang* and *y3u:I* are found to behave differently from each other and from when they combine with activity and accomplishment verbs. Kanchanawan (1978) suggests that achievement verbs in Thai can be classified into two subtypes. They are (i) those without activity and capturing the inception or climax of an eventuality that is not homogeneous (i.e. involving a change of state) such as *tla:y* 'die' and (ii) those with activity and capturing the inception or climax of an eventuality that is homogeneous (i.e. not involving a change of state) such as *h2en* 'see'. The subcategories seem sensible as they are found to differ at least according to their behaviour with *klaml3ang* and *y3u:I*. However, in terms of their interaction with *klaml3ang* and *y3u:I*, there is apparently a further subtype of achievement verbs, those which may be said to have an iterative interpretation, such as *kh3o* 'knock'. In my analysis, achievement verbs can thus be further classified into three categories. This categorisation corresponds with semelfactives, punctual achievements, and slow-motion achievements, as presented in Rothstein (2004), respectively. Rothstein (2004: 184) defines semelfactives as verbs that are used to denote single instances of eventualities that are usually considered activities. In other words, they are achievement verbs that describe eventualities that can happen repeatedly. Punctual achievements are verbs describing eventualities that do not occur over time but are nearly instantaneous, and the slow-motion reading of achievements concerns a normally instantaneous eventuality perceived as being stretched over time (Rothstein 2004: 37). (14) – (16) are their examples in English.

- (14) He is knocking at the door.  
 (15) He is dying.  
 (16) He is spotting the tower clock.

Note that (15) and (16) are consistent with the (i) and (ii) types of achievements in Kanchanawan (1978), respectively. The following subsections deal with how *klaml3ang* and *y3u:I* behave in relation to these subtypes of achievement verbs in Thai and what the interactions reveal about their semantics as aspect markers.

### 3.3.2.1 Semelfactives

An eventuality described by semelfactives receives an iterative interpretation when they combine with either of *klaml3ang* and *y3u:I* or both. In this case, the aspect expressed is evidently progressive by both *klaml3ang* and/or *y3u:I*. (17) is given as an example.

- (17) (a) kh2aw      klaml3ang      kh3o'      plr3at1u:  
          he            *klaml3ang*      knock      door
- (b) kh2aw      kh3o'      plr3at1u:      y3u:I  
          he            knock      door            *y3u:I*
- (c) kh2aw      klaml3ang      kh3o'      plr3at1u:      y3u:I  
          he            *klaml3ang*      knock      door            *y3u:I*

He is knocking at the door.

### 3.3.2.2 Punctual achievements

As for punctual achievements, neither of *klaml3ang* and *y3u:I* can occur alone or together with one such achievement verb. These are verbs which Sookgasem (1990) calls “extended achievement verbs” such as arriving, mentioned in Section 3.2. In other words, *klaml3ang* and *y3u:I* are not observed to combine with an achievement verb that cannot receive an iterative interpretation, i.e. only a non-iterative interpretation is available for it. The reason for this is that progressive forms of verbs denote ongoing eventualities occurring at an interval, over time, but non-iterative, punctual achievements are nearly instantaneous and thus do not occur over time. Although progressive punctual achievements are possible in English, as in (15), where the progressive triggers a type-shifting operation resulting in an accomplishment being derived from the achievement, as accounted for in Rothstein (2004), *klaml3ang* and/or *y3u:I* are not found to co-occur with this subtype of achievements in Thai. However, *klaml3ang* may combine with a punctual achievement verb in the presence of *clā* whereas *y3u:I* may not be used with an achievement verb even with *clā* and with or without *klaml3ang*. This is shown in (18).

- (18) \*(a) kh2aw      klaml3ang      t1a:y  
          he            *klaml3ang*      die
- \*(b) kh2aw      t1a:y      y3u:I  
          he            die            *y3u:I*
- \*(c) kh2aw      klaml3ang      t1a:y      y3u:I  
          he            *klaml3ang*      die            *y3u:I*

(d)	kh2aw he	k1aml3ang <i>k1aml3ang</i>	c1a <i>c1a</i>	t1a:y die		
*(e)	kh2aw he	k1aml3ang <i>k1aml3ang</i>	c1a <i>c1a</i>	t1a:y die	y3u:I <i>y3u:I</i>	
*(f)	kh2aw he	c1a <i>c1a</i>	t1a:y die	y3u:I <i>y3u:I</i>		

He is going to die.

The grammaticality of (17b) and the ungrammaticality of (18b) suggest that *kh3o* ‘knock’ and *t1a:y* ‘die’ are of somewhat distinctive nature even though both of them are achievement verbs. The difference lies on the fact that the former can have an iterative interpretation, when combining with *k1aml3ang* and/or *y3u:I*, whereas the latter cannot and thus cannot co-occur with either or both of the two. To put it more simply, you can knock at the door repeatedly, but in normal circumstances, you cannot keep dying in such a fashion. The fact that *y3u:I* cannot be used with punctual achievement verbs that cannot receive an iterative interpretation, with or without *k1aml3ang* and with or without *c1a*, seems to illustrate that the sense of progressiveness it conveys is less dynamic, more permanent than that of *k1aml3ang*<sup>4</sup>. This does not seem as obvious when they co-occur with activity and accomplishment verbs, in Section 3.3.1, as when they accompany a punctual achievement verb. Since an eventuality described by this type of achievement verbs characteristically occurs in an instant, it is incompatible, by definition, with the less dynamic, more permanent progressive aspect conveyed by *y3u:I*.

On the other hand, the fact that *k1aml3ang* can be used with punctual achievement verbs only when *c1a* is also present is likely to confirm that the aspectual meaning it expresses is progressiveness. That is, it has to be used with a verb that describes an eventuality that clearly has some duration, or is conceptualised to do so, to refer to the fact that it is in progress at a relevant reference time. Although an eventuality of dying might be seen by a physician as to consist of a number of stages, as pointed out admittedly quite rightly by Dowty (1986), it does not seem to be perceived that way by average laymen. Rather, an eventuality of dying, a change of state from being alive to being dead, does not typically take time. In other words, it involves a change of state that naturally takes place in an instant, and that is why *k1aml3ang* cannot co-occur with it. Nevertheless, with the modal *c1a*, arguably its epistemic possibility meaning turns an eventuality of dying into a possibility of dying, which can be extended over a stretch of time. Therefore, *k1aml3ang* can then be used with a punctual achievement verb when *c1a* is also present, and this accounts for the grammaticality of (18d). Another argument that may be made here is that the ungrammaticality of (18abc) seems to convincingly point to the fact that punctual achievement verbs are different from

<sup>4</sup> *Y3u:I* can occur with a punctual achievement verb when, with or without *k1aml3ang*, the modal *c1a* precedes the verb and *l3ae:wII* ‘already’ follows it. For example, the following are possible sentences in Thai. It seems that, with *y3u:I* and *l3ae:wII*, (i) and (ii) describe an eventuality of dying that is closer to the relevant reference time point than that in (18d). However, I will not go into more detail on this because *l3ae:wII* falls out of the scope of my research.

(i)	kh2aw he	k1aml3ang <i>k1aml3ang</i>	c1a <i>c1a</i>	t1a:y die	y3u:I <i>y3u:I</i>	l3ae:wII already
(ii)	kh2aw he	c1a <i>c1a</i>	t1a:y die	y3u:I <i>y3u:I</i>	l3ae:wII already	

He is very close to dying.

accomplishment ones, which can combine fairly freely with *klaml3ang* and *y3u:I*, as shown in (13), and that, contrary to Dowty's proposal (1986), a distinction should thus be made between them, as least in Thai.

Another example that may be given to strengthen the claim that *klaml3ang* is a progressive marker when combined with achievement verbs that cannot receive an iterative interpretation is (19).

- (19) kh2aw    klaml3ang    cla    tla:y    tlaae:I    cla    m3aiI    tla:y  
          he            *klaml3ang*    *cla*    die       but       *cla*    not       die

He is dying but will not die

Suppose that we are in the situation where the person referred to in (19) is lying on his death bed but we know that he will not die thanks to some magical wishes that are certain to be granted. The possibility of the eventuality described by the first *tla:y* 'die' is in the progressive aspect, i.e. going on at a relevant reference time, but, as indicated by the following clause that contains the second *tla:y* 'die', such eventuality has no possibility of taking place. *Klaml3ang* in (19) thus expresses an aspect that is clearly progressive as it apparently induces the imperfective paradox here.

### 3.3.2.3 Slow-motion achievements

Apart from semelfactives and punctual achievements, there is another subtype of achievement verbs that relate differently to *klaml3ang* and *y3u:I* from the previous two. They are slow-motion achievements, or verbs that describe eventualities that are normally instantaneous but may be perceived as being stretched over time. These include *h2en* 'see' in the sense of both 'spotting with eyes' and 'understanding'. It is observed that *klaml3ang* cannot be used with *h2en* 'see', with or without *y3u:I*, whereas *y3u:I* can combine with it in the absence of *klaml3ang*. See (20) and (21) for examples.

- (20) \*(a) kh2aw y3ang klaml3ang h2en h2o': n3a:l3ik1a:  
          he    still    *klaml3ang*    see    tower    clock
- \*(b) kh2aw y3ang klaml3ang h2en h2o': n3a:l3ik1a: y3u:I  
          he    still    *klaml3ang*    see    tower    clock       *y3u:I*
- (c) kh2aw y3ang h2en h2o': n3a:l3ik1a: y3u:I  
          he    still    see    tower    clock       *y3u:I*

He is still seeing the tower clock.

- (21) \*(a) klaml3ang h2en w3a:I plenplaiIm3aiIdlaiII  
          *klaml3ang*    see    *particle*    impossible
- \*(b) klaml3ang h2en y3u:I w3a:I plenplaiIm3aiIdlaiII  
          *klaml3ang*    see    *y3u:I*    *particle*    impossible
- (c) h2en y3u:I w3a:I plenplaiIm3aiIdlaiII  
          see    *y3u:I*    *particle*    impossible

I am seeing that it is impossible.

An eventuality of seeing in both senses of the verb *h2en* ‘see’ can extend over a period of time, hence the grammaticality of (20c) and (21c). My hypotheses are that (i) *k1aml3ang* is not compatible with either of the senses of *h2en* ‘see’ because it marks the progressive aspect, which indicates a temporary state, but, once extended, the eventuality described by slow-motion achievements may be conceptualised as relatively more permanent, and (ii) *y3u:I* can occur with both because it expresses the less dynamic, more permanent version of progressiveness. This has been discussed in Section 3.3.2.2 when it is found to be incompatible with punctual achievements, which is why it is compatible with extended slow-motion achievement verbs. Therefore, not only do achievement verbs differ from accomplishment verbs in Thai, but the former are also different among themselves in terms of whether or not they can receive an iterative interpretation and involve an activity and a change of state and thus whether or not they can co-occur with *k1aml3ang* and/or *y3u:I*. The differences of the three types of achievement verbs in turn seem to show that the semantics of *k1aml3ang* and *y3u:I* are not exactly the same. This will be considered in Section 3.3.4.

### 3.3.3 State verbs

As for state verbs, *k1aml3ang* and *y3u:I* are found to occur alone or together with them, no matter how temporary or permanent they are, as shown in (22) – (25).

(22) (a) ch2an k1aml3ang h2iw ph3o’:dli:  
I *k1aml3ang* hungry right now

(b) ch2an h2iw y3u:I ph3o’:dli:  
I hungry *y3u:I* right now

(c) ch2an k1aml3ang h2iw y3u:I ph3o’:dli:  
I *k1aml3ang* hungry *y3u:I* right now

I am hungry right now.

(23) (a) ch3uangI n3i:II ch2an k1aml3ang ch3o’:p ’1a:h2a:n ’1ind1ia  
period this I *k1aml3ang* like food India

(b) ch3uangI n3i:II ch2an ch3o’:p ’1a:h2a:n ’1ind1ia y3u:I  
period this I like food India *y3u:I*

(c) ch3uangI n3i:II ch2an k1aml3ang ch3o’:p ’1a:h2a:n ’1ind1ia y3u:I  
period this I *k1aml3ang* like food India *y3u:I*

I like Indian food at the moment.

(24) (a) ch3uangI n3i:II ch2an k1aml3ang r3ak ch3a:t  
period this I *k1aml3ang* love nation

(b) ch3uangI n3i:II ch2an r3ak ch3a:t y3u:I  
period this I love nation *y3u:I*

(c) ch3uangI n3i:II ch2an k1aml3ang r3ak ch3a:t y3u:I  
period this I *k1aml3ang* love nation *y3u:I*

I am being nationalistic now.

(25)	(a)	ch2an I	k1aml3ang <i>k1aml3ang</i>	p1en be	kh3r3u: teacher	t1o':nn3i:II now	
	(b)	ch2an I	p1en be	kh3r3u: teacher	y3u:I <i>y3u:I</i>	t1o':nn3i:II now	
	(c)	ch2an I	k1aml3ang <i>k1aml3ang</i>	p1en be	kh3r3u: teacher	y3u:I <i>y3u:I</i>	t1o':nn3i:II now

I am being a teacher now.

Of the four examples, *h2iw* 'be hungry' in (22) is naturally most temporary, *ch3o':p '1a:h2a:n 'lind1ia* 'like Indian food' in (23) is relatively more permanent, *r3ak ch3a:t* 'be nationalistic' in (24) is somewhat even more permanent, and *p1en kh3r3u:* 'be a teacher' in (25) is seemingly most permanent. While Muansuwan's remark that state verbs belong to a continuum of degree of permanence (2000: 104) is certainly a sound linguistic fact, it does not seem to have anything to do with whether a particular state verb can co-occur with *k1aml3ang* and/or *y3u:I* or not, as she claims it to be.

However, when state verbs, especially less temporary, more permanent ones, combine with *k1aml3ang* and/or *y3u:I*, they seem to have a clear tendency to give rise to certain pragmatic inferences. For example, (23) – (25) are highly likely to have pragmatically inferred meaning, as in (26) – (28), respectively.

- (26) I often go to Indian restaurants these days.  
 (27) I no longer buy imported goods.  
 (28) I am lecturing you at the moment

Some detailed explanations are in order. By way of saying (23) and (24), the speaker may not be communicating simply that the eventualities of him or her liking Indian food and being nationalistic are ongoing at the utterance time but may in effect be implicating that he or she often goes to Indian restaurants these days and that he or she is now determined not to buy products imported from foreign countries, respectively. Similarly, (25) may be said as an excuse for a propensity to lecture other people and need not entail that the speaker is a teacher by profession. In fact, the speaker of (25) does not definitely refer to the fact that he or she is a teacher by profession, and he or she is not necessarily one to be able to say it, either. To say that he or she is a teacher by profession, the speaker needs no aspect marker. That is, *ch2an p1en kh3r3u:* 'I be teacher' typically means 'I am a teacher (by profession)' in Thai (see also 43). In other words, it seems that, when accompanied by *k1aml3ang* and/or *y3u:I*, state verbs, especially those pertaining to somewhat more permanent states, are used to communicate that an eventuality is in progress that shows certain qualities which can be considered typical of the state. As far as the aspectual meanings conveyed by *k1aml3ang* and *y3u:I* when they are used with state verbs are concerned, both seem to express progressive. The eventuality described by a state verb marked with *k1aml3ang* and/or *y3u:I* is usually seen as ongoing at a reference time and lasting over a short period of time.

It is noteworthy to add that while, in English, state verbs do not usually take what is traditionally called the continuous verb form on the grounds, mentioned in Section 3.2, that the aspectual type of verbs describe eventualities that are intrinsically durative and thus have no need to be grammatically marked for the progressive aspect, Thai state verbs can occur with either *k1aml3ang* and/or *y3u:I*. The reason for this seems to be as follows. When a state verb pertains to a temporary state, the presence of *k1aml3ang* and/or *y3u:I* not only marks the progressive aspect but also gives emphasis to the already clear durative eventuality such as that of being hungry in (22). On the other hand, when it is a state verb that concerns a

comparatively more permanent state, the presence of *klaml3ang* and/or *y3u:I* similarly not only marks the progressive aspect but also often triggers pragmatic inferences relevant to certain qualities typical of the state, as shown in (23) – (25).

To sum up, *klaml3ang* and *y3u:I* can co-occur with activity, accomplishment, state verbs and semelfactives in all of the constructions in (1). In these cases, where all the verbs describe eventualities that clearly have some duration, or can be conceptualised to do so, the two, jointly or separately, apparently express the progressive aspect. Not all the constructions in (1) are possible, however, with a punctual or slow-motion achievement verb. While *klaml3ang* can combine with punctual achievement verbs only when it is immediately followed by *clā*, merely *y3u:I* can be used with slow-motion achievement verbs. That is, punctual achievements can occur in (1a) and not others whereas slow-motion ones can occur in (1b) only. I hypothesise that this is the case because *y3u:I* expresses less dynamic, more permanent types of progressiveness than *klaml3ang* (see 3.3.2.2 and 3.3.2.3). The following section further investigates into this more permanent nature of *y3u:I*.

### 3.3.4 Temporal measure adverbs

The term ‘temporal measure adverbs’, as used in Kamp and Reyle (1993), means temporal adverbs that specify the duration of an eventuality such as *for an hour* or *in an hour*. According to Koenig and Muansuwan (2000), the former is an example of ‘duration adverbial phrases’ while the latter is called an ‘interval adverbial phrases’. In this section, I discuss the relations between the duration adverbial phrases, *klaml3ang* and *y3u:I* and durative aspectual types of verbs including activity, accomplishment, state, and semelfactive verbs. This will shed some light on the slightly distinct shades of aspectual meanings *klaml3ang* and *y3u:I* convey. The so-called duration adverbial phrases, however, are referred to as temporal measure adverbs or simply measure adverbs, to be in line with Discourse Representation Theory (Kamp and Reyle 1993), the framework of which *klaml3ang* and *y3u:I* are formally represented in Section 4.

It is observed that only (1b), and not (1a) and (1c), can be followed by a temporal measure adverb, as shown in (29). Note also that that no progressive meaning seems to be present in (29) and its default interpretation is past time reference. These will be dealt with later on in this section.

(29)	(a)	kh2aw	h2l3op	y3u:I	s3a:m	ch3ualm3o:ng	
		he	hide	<i>y3u:I</i>	three	hour	
	* (b)	kh2aw	klaml3ang	h2l3op	(y3u:I)	s3a:m	ch3ualm3o:ng
		he	<i>klaml3ang</i>	hide	( <i>y3u:I</i> )	three	hour

He hid for three hours.

The grammaticality of (29a) and the ungrammaticality of (29b) seem to show that *y3u:I*, and not *klaml3ang*, is compatible with temporal measure adverbs, no matter whether the latter is accompanied by the former or not. The observation is applicable to all aspectual types of verbs that describe eventualities that clearly have some duration (i.e. activity, accomplishment and state verbs), or can be conceptualised to do so (i.e. semelfactive verbs). This is shown in (30) – (34).

(30)	(a)	ch3a:wp1r3am3ong	h2a:p1l3a:	y3u:I	s3a:m	ch3ualm3o:ng
		fisherman	fish	<i>y3u:I</i>	three	hour
	* (b)	ch3a:wp1r3am3ong	klaml3ang	h2a:p1l3a:	(y3u:I)	

fisherman                      *klaml3ang*                      fish                      (*y3u:I*)

s3a:m      ch3ualm3o:ng  
three      hour

The fisherman fished for three hours.

(31) (a) kh3onng3a:n    s3o':mI    th2an3on    y3u:I    s3ong    d1ua'n  
workman      repair      road      *y3u:I*      two      month

\*(b) kh3onng3a:n    klaml3ang    s3o':mI    th2an3on    (*y3u:I*)  
workman      *klaml3ang*      repair      road      (*y3u:I*)

s3ong      d1ua'n  
two      month

The workmen repaired the road for two months.

(32) (a) kh2aw      kh3o'      p1r3at1u:    y3u:I      h2a:II      n3a:th3i:  
he      knock      door      *y3u:I*      five      minute

\*(b) kh2aw      klaml3ang    kh3o'      p1r3at1u:    (*y3u:I*)  
he      *klaml3ang*      knock      door      (*y3u:I*)

h2a:II      n3a:th3i:  
five      minute

He knocked at the door for five minutes.

(33) (a) ch2an    h2iw    y3u:I    kh3r3u'ngI    ch3ualm3o:ng  
I      hungry    *y3u:I*    half      hour

'1a:h2a:ny3en    c1u'ng    m3a:    s2oe:p  
dinner      so      come    serve

\*(b) ch2an    klaml3ang    h2iw    (*y3u:I*)    kh3r3u'ngI    ch3ualm3o:ng  
I      *klaml3ang*    hungry    (*y3u:I*)    half      hour

'1a:h2a:ny3en    c1u'ng    m3a:    s2oe:p  
dinner      so      come    serve

I was hungry for half an hour before dinner was served.

(34) (a) ch2an      p1en      kh3r3u:      y3u:I      c1et      pli:  
I      be      teacher      *y3u:I*      seven      year

c1u'ng      m3a:      r3ian      t1o':I  
so      come      study      further

\*(b) ch2an      klaml3ang      p1en      kh3r3u:    (*y3u:I*)    c1et      pli:  
I      *klaml3ang*      be      teacher    (*y3u:I*)    seven      year

---



---

clu'ng	m3a:	r3ian	tlo':I
so	come	study	further

I was a teacher for seven years before I furthered my studies.

The fact that *klaml3ang* cannot, but *y3u:I* can, co-occur with temporal measure adverbs may lead to the hypothesis that the two auxiliaries do not match exactly in terms of aspectual meanings they express. If *klaml3ang* and *y3u:I* were one and the same in these contexts, they should both also be compatible with temporal measure adverbs. It seems that *klaml3ang* may not be used with adverbs that specify the duration of an eventuality because the progressive aspect, the internal ongoing nature of an eventuality, it conveys is relatively more temporary, less permanent than *y3u:I*. As remarked in Sections 3.3.2.2 and 3.3.2.3, where the punctual and slow-motion achievements are discussed, the way *klaml3ang* and *y3u:I* behave in relation to these two varieties of achievements seems to also point out that it is the case that *y3u:I* is less temporary, more permanent than *klaml3ang*. As the non-progressive aspect can be defined negatively as more permanent compared with the progressive aspect, it can be said that *y3u:I* is in fact a non-progressive aspect marker while *klaml3ang* is truly a progressive aspect marker. This accounts for the fact that progressive meaning does not seem to be present in the absence of *klaml3ang* in (29a) – (34a). The position is especially clear when we look at state verbs that concern relatively permanent state of affairs, such as *p1en kh3r3u:* ‘be a teacher’. When it combines with *klaml3ang*, with or without *y3u:I*, as in (25), it describes the state of being a teacher, or rather a tendency to lecture other people, that is definitely more temporary, less permanent than the one depicted in (34a), where the state verb co-occurs with *y3u:I* and refers to the relatively more permanent state of being a teacher by profession. The discussion so far seems to point to the fact that *klaml3ang* and *y3u:I* are markers of different kinds of continuous aspect, that is, progressive and non-progressive, respectively. This is the major claim made in this paper. If we also take into account their lexical meanings of ‘strength’ and ‘stay’, the analysis makes even more sense albeit pre-theoretically. The reason for this is that for an eventuality to be in progress, some sort of ‘strength’ needs to be applied to it whereas a relatively more permanent state of affairs can be said to just ‘stay’ that way. As for when *klaml3ang* and *y3u:I* co-occur, in (1c), the ungrammaticality of (30b) – (34b) evidently shows that the verb phrases cannot combine with temporal measure adverbs so presumably are in the progressive aspect; therefore, it is the progressive aspect of *klaml3ang* that overrides the non-progressive aspect of *y3u:I* when the two co-occur.

It can also be noticed that when *y3u:I* is followed by a temporal measure adverb, as in (29a) – (34a), its default reading of presentness is cancelled (see also Section 3.1) and only the past time interpretation is possible. This apparently has something to do with the bounded event constraint, mentioned in Smith (2004), which stipulates that bounded eventualities are not located at the time of utterance. The non-progressive form of verbs, e.g. *h2a:p1l3a: y3u:I* ‘fish *y3u:I*’ in (12b), which denotes an unbounded eventuality, is rendered bounded by temporal measure adverbs, such as *s3a:m ch3uaIm3o:ng* ‘three hours’ in (30a). This is why the utterance in (30a), which describes a bounded eventuality, cannot be interpreted as having the utterance time as the eventuality time, unlike the one in (12a), which has present time reference due to the presence of *y3u:I* and absence of cancellation.

- (12) (b) ch3a:wp1r3am3ong h2a:p1l3a: y3u:I  
fisherman fish y3u:I

The fisherman is fishing.

- (30) (a) ch3a:wp1r3am3ong h2a:p1l3a: y3u:I s3a:m ch3uaIm3o:ng

fisherman                      fish                      *y3u:I*      three                      hour

The fisherman fished for three hours.

Smith (2004) also points out that the key factor for inferring the eventuality time in Mandarin is boundedness of the eventuality described by an utterance. That is, the default eventuality time of unbounded eventualities is the utterance time while the default eventuality time of bounded eventualities lies before the utterance time. This is found to be the case with Thai, too. Therefore, the unbounded eventuality in (12b) has the present time reference whereas the bounded one in (30a) has the past time reference. In brief, it can be said that the default interpretation of *y3u:I* followed by a temporal measure adverb is past time reference and no longer present time reading. For the utterance containing temporal measure adverbs to have the present time interpretation, *y3u:I* has to be replaced by *m3a:* ‘come’ as in (35).

(35)    *ch3a:wp1r3am3ong*    *h2a:p1l3a:*    *m3a:*    *s3a:m*    *ch3uaIm3o:ng*  
 fisherman                      fish                      come      three                      hour

The fisherman has been fishing for three hours.

Unlike *y3u:I*, as in (29a) – (34a), which expresses non-progressiveness and gives rise to past time reference when preceding a temporal measure adverb, *m3a:* ‘come’ followed by such adverb phrases as *s3a:m ch3uaIm3o:ng* ‘for three hours’ in (35) seems to specify that the eventuality of fishing, understood to have started before a relevant reference time point due to the fact that the verb *h2a:p1l3a:* ‘fish’ is an activity verb and thus indicates an event, which in turn comes with a past time implication, extends and continues up to and possibly beyond the reference time. When the relevant reference time is the utterance time, the present time interpretation is possible. One conclusion that may be drawn from this is that *klaml3ang* and *y3u:I*, unlike the progressive *be + verb-ing* form in English, seem to have certain constraints imposed upon them as to what time and aspect they can combine with. For example, (36) shows that while the English progressive is compatible with futurity and the perfect aspect, *klaml3ang* and *y3u:I* are not, supposing that it is spoken before five o’ clock of the utterance day.

(36)    \*(a)    *ch3a:wp1r3am3ong*    *c1a*    *klaml3ang*    *h2a:p1l3a:*    *y3u:I*  
 fisherman                      *c1a*    *klaml3ang*    fish                      *y3u:I*

*kh3r3op*    *s3a:m*    *ch3uaIm3o:ng*    *t1o’:n*    *h2a:II*    *m3ong*  
 all                      three      hour                      when      five      o’ clock

*y3en*                      *w3ann3i:II*  
 evening                      today

              (b)    *ch3a:wp1r3am3ong*    *c1a*    *h2a:p1l3a:*    *m3a:*    *kh3r3op*  
 fisherman                      *c1a*    fish                      come      all

*s3a:m*    *ch3uaIm3o:ng*    *t1o’:n*    *h2a:II*    *m3ong*  
 three      hour                      when      five      o’ clock

*y3en*                      *w3ann3i:II*  
 evening                      today

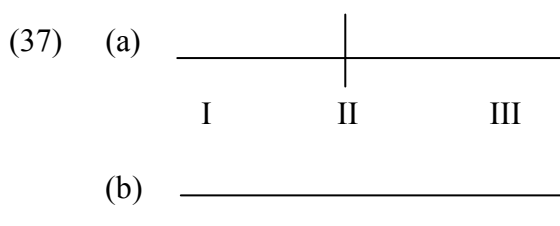
The fisherman will have been fishing for totally three hours at 5 o’ clock this

evening.

However, this does not prevent *klaml3ang* and *y3u:I* from being aspect markers in Thai, and due to lack of space, I will not make further investigation of this. In what follows, I show how the aspectual meanings of *klaml3ang* and *y3u:I* as progressive and non-progressive markers, respectively, may be represented in Discourse Representation Theory.

#### 4. *KIAML3ANG* AND *Y3U:I* IN DISCOURSE REPRESENTATION THEORY

This section discusses how *klaml3ang* and *y3u:I* may be represented in Discourse Representation Theory (DRT). In DRT, the progressive aspect in English is rendered by the operator PROG applied to the predicate in the discourse representation structure (DRS). We should be able to use PROG to represent the progressive aspect in Thai conveyed by *klaml3ang*, as well, both when it occurs alone, as in (1a), or when it co-occurs with *y3u:I*, as in (1c). However, the semantics of PROG is still a matter of research. The semantic effect of the English progressive is summarised by Kamp and Reyle (1993: 566) as follows: “The eventualities described by progressive forms of a verb *v* are of the type which is represented by that part of the schema corresponding to the Aktionsart of *v* which terminates in, but does not include, the culmination point.” Aktionsart is the term Kamp and Reyle (1993) use to refer to aspectual types of verbs. Two schemata for activity, accomplishment and achievement verbs, on the one hand, and state verbs on the other hand, are provided in Kamp and Reyle (1993: 558, and 567). (37a) reproduces the schema for activity, accomplishment and achievement verbs, and (37b) state verbs. I, II, and III in (37a) stand for the preparatory phase, culmination point and result state of an eventuality described by an activity, accomplishment or achievement verb, respectively. Kamp and Reyle (1993: 563 – 565) explain, however, that unlike the other two, the culmination point is not made available by activity verbs themselves but will have to be provided externally. For example, an end point may be imposed linguistically, e.g. in the form of such temporal measure adverbs as *for three hours*, or by the context in which the utterance appears. On the other hand, the fact that (37b) is a single stretch with the culmination point at the end, which explicitly represents the termination of the state, indicates that a state verb describes an eventuality that lacks preparatory and result stages.



Although these schemata are given for verbs in English, they are also applicable to Thai verbs. When *klaml3ang* or both *klaml3ang* and *y3u:I* accompany an activity, accomplishment, or achievement verb that receives an iterative interpretation, or a semelfactive verb, and the progressive aspect is expressed, the eventuality described is represented by the part of the schema (37a) corresponding to that which is in progress at a point of time between after its preparatory phase and before it reaches the culmination point, that is, ongoing at one point between I and II and excluding II. When *klaml3ang* or both *klaml3ang* and *y3u:I* combine with a state verb, the progressive aspect is expressed. Since state verbs describe eventualities that lack preparatory and result stages, the eventuality described when a state verb co-occurs with *klaml3ang* or both *klaml3ang* and *y3u:I* is represented by the part of the schema (37b) corresponding to that which is extended for a period of time before it reaches the culmination, i.e. termination point. In these cases, PROG

can be applied to the predicate in the DRS to represent the progressive aspect. As for when *y3u:I* occurs alone without *k1aml3ang* and the non-progressive is expressed, the same part of the schema is represented but the aspectual operator PROG need not be applied.

Let us now take a look at a DRS for a Thai sentence with *k1aml3ang* and *y3u:I* in it, the representation (39) of (38). Note that the eventuality here is described by an activity verb.

(38) *t1o':nn3i:II* *kh2aw* *k1aml3ang* *h2a:p1l3a:* *y3u:I*  
 now he *k1aml3ang* fish *y3u:I*

He is fishing now.

(39)

$n \ s \ x \ t$ $t = n$ $s \ O \ t$ contextually salient male (x) s: <span style="border: 1px solid black; padding: 2px;">x PROG(h2a:p1l3a:)</span>
---

The procedure for constructing the DRS (39) is explained by Kamp and Reyle's construction rules (1993). Discourse referents and discourse conditions are as below:

1. Two discourse referents *t* and *n* for the eventuality time and the utterance time, respectively.
2. A condition relating the eventuality time *t* to the utterance time *n*. It is  $t = n$  in this case, as triggered by the adverb *t1o':nn3i:II* 'now'.
3. A condition saying that there is a state *s* (because an activity in progress is always a state) which temporally overlaps the location time *t*, i.e.  $s \ O \ t$ .
4. The discourse referent *x* for *kh2aw* 'he' or 'contextually salient male'<sup>5</sup>.
5. The progressive operator PROG is applied to the predicate *h2a:p1l3a:* 'fish', as triggered by *k1aml3ang*, which overrides the non-progressive aspect meaning of *y3u:I*.

The temporal information in (38) is represented by two conditions. First,  $t = n$  means that the eventuality time *t* is at the same time as the utterance time *n*. Secondly,  $s \ O \ t$  means that the state *s* temporally overlaps the eventuality time *t*. The aspectual information in (38) is represented by the progressive operator PROG applied to the predicate *h2a:p1l3a:* 'fish'. It is suggested that PROG (*h2a:p1l3a:* 'fish') means that the event of fishing has begun (before the utterance time), is going on (at the utterance time), and is going to end (after the utterance time). The DRS-construction for (38) is possible because the temporal and aspectual information is explicitly shown by *t1o':nn3i:II* 'now', which triggers  $t = n$ , and *k1aml3ang*, which signals PROG.

Another example involves an accomplishment verb followed by a temporal measure adverb. As explained in Section 3.3.4, *k1aml3ang* is not found in this collocation and when *y3u:I* is accompanied by a measure adverb, its available default reading is past time interpretation. In order to use DRT for Thai, one has to depart from Kamp and Reyle's (1993) practice of representing tenses and allow more pragmatic input into DRSSs, including defaults. The DRS in (41) is the semantic representation of (40).

<sup>5</sup> The discourse referent *x* is used to represent 'contextually salient male', which, under a general predicative condition, stands for the pronoun *kh2aw* 'he'. This is done for the sake of simplicity. The representation of pronouns is largely unsettled albeit widely discussed in the DRT literature. No additional discussion of the resolution of pronouns will be furnished here.

- (40) kh2aw s3o':mI th2an3on y3u:I s3ong d1ua'n  
 he repair road y3u:I two month  
 He repaired the road for two months.

- (41)
- n s x y t mt  
 n > t  
 s O t  
 contextually salient male (x)  
 th2an3on (y)  
 s3ong d1ua'n (mt)

s: x (s3o':mI) y

The procedure for constructing the DRS (41) is introducing various discourse referents and discourse conditions in essentially the same way as for (39) except that the condition relating the utterance time and the eventuality time is such that the latter lies before the former, hence  $n > t$ , and that no PROG is applied. The temporal information in (40) is given implicitly by the default of *y3u:I* followed by the measure adverb *s3a:m ch3uaIm3o:ng*, which, as discussed in Section 3.3.4, makes only past time interpretation possible, which in turn prompts the introduction of  $n > t$  in the DRS. As for the aspectual information, no progressiveness is shown by *y3u:I*, so PROG is not needed. The temporal information in (41) is thus represented by two conditions. First,  $n > t$  means that the eventuality time  $t$  lies before the utterance time  $n$ . Secondly,  $s O t$  means that the state  $s$  temporally overlaps the eventuality time  $t$ . The aspectual information in (40) is implicitly represented by the discourse referent  $mt$ , which is specified as *s3ong d1ua'n* ‘two months’ and indicates that the event of repairing the road is taking place over a period of two months.

We have now seen how DRSs may be made more pragmatic in (41). This will become more even more obviously needed in the example below. A discernible problem arises when in an utterance there is no what is called temporal locating adverb in Kamp and Reyle (1993) such as *t1o':nn3i:II* ‘now’ in (38), and when, unlike in (40), no temporal information is implicitly given by collocations of certain linguistic items. Take (17c) as a case in point, and note that here, unlike in Section 3.3.2.1, both of its possible temporal meanings are provided. The verb *kh3o'* ‘knock’ is a semelfactive, or an achievement verb that, accompanied by *klaml3ang* and/or *y3u:I*, receives an iterative interpretation.

- (17) (c) kh2aw k1aml3ang kh3o' plr3at1u: y3u:I  
 he klaml3ang knock door y3u:I

He is/was knocking at the door.

- (42)
- n s x y t  
 n ? t  
 s O t  
 contextually salient male (x)  
 plr3at1u: (y)

s: x PROG(kh3o') y

On the basis of grammar and lexicon in (17c), the construction of its DRS (42) cannot be completed as no condition can be given to signify the relation between the eventuality time  $t$  and the utterance time  $n$ . An important piece of temporal information is left unspecified as nothing in (17c) indicates how the eventuality time  $t$  is to be related to the utterance time  $n$ , or to be more specific, whether it is  $n > t$  or  $n = t$ . Note that  $n < t$  is not possible here since *clā* is not present to give rise to pragmatic inference of futurity. The only temporal information that can be represented in the DRS from the compositional semantics of (17c) is  $s \circ t$ , i.e. that the state of knocking at the door temporally overlaps the eventuality time. On the other hand, the aspectual information is PROG applied to the predicate *kh3o* 'knock', which is triggered by *klāml3ang*, which overrides the non-progressive of *y3u:I*. This seems to confirm their status in Thai grammar as aspect markers, and not temporal markers, as no temporal location is explicitly given in their presence. This also seems to support that when grammar and lexicon in a sentence is not sufficient for temporal interpretation, we need to look at larger contexts for temporal information concerning when the eventuality described in the utterance occurs. That is to say, to locate the eventuality time in relation to the utterance time of an eventuality described in Thai is often a matter of consulting not only the syntactic structure but also the contextual structure in a discourse. This is as remarked by Diller (1993: 412): Temporal and aspectual interpretation in Thai is usually "a matter of contextual interpretation". Currently, to solve this problem, DRT would propose a set of available representations for both 'is' and 'was' meanings of (17c).

Another apparent difficulty is when a state verb is marked by *klāml3ang* and/or *y3u:I* to refer to an eventuality that is not quite the same as when the same verb is not aspectually marked, especially when it is a state verb that concerns a relatively more permanent state. For example, how is (25c) to be distinguished from (43)? Is it satisfactory that PROG is plainly applied to the predicate *p1en* 'be', as in DRS (44), to represent (25c), whereas in the mental representation (45) of (43), no aspectual operator is introduced due to lack of aspect markers in the utterance? At this point, this is provisionally acceptable.

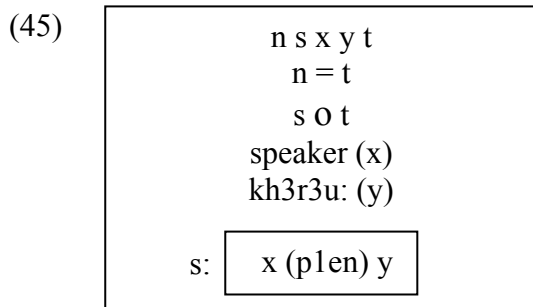
- (25) (c) ch2an k1āml3ang p1en kh3r3u: y3u:I t1o':nn3i:II  
 I k1āml3ang be teacher y3u:I now

I am now being a teacher.

- (43) t1o':nn3i:II ch2an p1en kh3r3u:  
 now I be teacher

I am now a teacher.

- (44)
- |   |
|---|
| n s x y t   |
| n = t   |
| s o t   |
| speaker (x)   |
| kh3r3u: (y)   |
| s: <span style="border: 1px solid black; padding: 2px;">x PROG(p1en) y</span> |



To summarise, there seems to be virtually no complexity as far as the representation of *klaml3ang* and/or *y3u:I* in DRT is concerned when either or both of them accompany activity, accomplishment, and achievement verbs, and state verbs that retain their meaning when marked by the aspect markers. That is, their presence in an utterance invariably introduces in its DRS the aspectual operator PROG or no aspectual operator to be applied to the predicate. The option of whether aspectual operators PROG is to be triggered or not essentially depends on whether *y3u:I* occurs alone without *klaml3ang*; if so, no PROG is needed. When it is a relatively more permanent state verbs whose meaning apparently changes slightly when combining with *klaml3ang* and/or *y3u:I*, it is tricky in that it has to be established whether the changed meaning can be exhaustively covered in the aspectual operator PROG or not. There is also a complication in determining the relation between the eventuality time and the utterance time while constructing a DRS when there is no temporal locating adverbs in an utterance that contains *klaml3ang* and/or *y3u:I*. However, a lack of such adverbs poses such a problem also in the absence of the aspect markers. That is to say, this does not seem to directly concern the issue at hand, which is to represent *klaml3ang* and *y3u:I* in DRT. In fact, this simply serves to confirm also that *klaml3ang* and *y3u:I* are aspect markers and not temporal markers in Thai; they express the aspectual properties of an eventuality and do not seem to have anything to do with its location on the time line.

## 5. CONCLUSIONS

It has been illustrated that *klaml3ang* and *y3u:I*, when they behave in an auxiliary-like manner, do not express presentness. The facts that (i) certain conditions apply when they combine with different aspectual types of verbs and (ii) their meanings become clearer when they co-occur with temporal measure adverbs, seem to strongly suggest that they are aspect markers. It has also been shown that *klaml3ang* is best analysed as a progressive marker whereas *y3u:I* is found to express the non-progressive, and that when they co-occur, the aspectual meaning of the former overrides that of the latter. When it comes to representing them in DRT, the aspectual operators PROG may be applied to the predicate as appropriate.

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