Grammatical conceptual structure of numeral classifiers in Thai – Part 2

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Abstract

Standard Thai exhibits a complex noun classifier system categorizing the world for the Thai. One category, bay, consists of objects such as leaves, paper documents, files, cups, plates and car batteries among other things. Another category, lűuk, classifies objects such as fruit, balls, candy, monsoons and car keys. Furthermore, certain objects, such as baskets, gongs and mattresses can be classified by either bay or lűuk, imposing a degree of semantic skewing across these categories. Are these categories arbitrary and random or is there internal structure motivating them? Are the classifiers themselves merely grammatical devices or do they also have inherent semantic content, which they contribute to the meaning of the noun phrase? While some research on Thai classifiers has been presented (Delancey 1986; Placzek 1978), I am aware of none that pursue an in depth synchronic analysis implying the need for an integrated account of semantics and grammar.

First, I demonstrate that the categories of bay and lűuk are indeed semantically structured employing prototype effects similar to those discussed in Lakoff (1987). Secondly, the data that show semantic skewing between bay/lűuk find motivation under this prototype analysis. This section of research is presented earlier in Part 1 (Inglis 2000). Finally, Part 2 of this research (presented here) reveals that the classifiers themselves are shown to not only grammatically link a noun with its quantifier/qualifier but also contribute semantic content, such as shape and function, to the meaning of the noun itself. That is, the classifiers are not just arbitrary syntactical units that help construct the Thai grammatical noun phrase but also important semantic symbols that provide additional reference to the overall meaning invoked. This evidence from Thai supports a theoretical framework along the lines of Langacker (1991). Such a framework requires grammatical and semantic structure to be analyzed under a single integrated theory. Appealing to general cognitive capacities, such as organizing categorial structure around prototypes and the sanctioning of category members in terms of degrees of divergence from such prototypes, helps to capture explicitly the full linguistic motivation for noun quantification in Thai.

The present investigation motivates the synchronic ‘incoherent aggregations’ (Delancey 1986) found in a modern language like Thai, but also points out the direction for future diachronic research, such as the chronology of innovations that a complex system might take to classify categories in its evolved state; or, the etymological beginnings of the classifiers themselves.
บทคัดย่อ

ภาษาไทยมีระบบคำลักษณะที่ช่วยสร้างชื่อคนไทยใช้จัดหมวดวัตถุหรือของต่างๆในโลก mundane คือคำว่า ไป ใช้แทนสิ่งต่างๆเช่น ไปใต้เตากร แล้วนำ จาน และแบ่งหรือวัตถุของของต่างๆ เช่น นำไป ลูกมัน ลูกอม ขนมผัดและเกลือกระเทย นอกจากนี้สิ่งของบางอย่างนั้น ตะวัน จันทร์ และชุมชนสามารถใช้คำลักษณะนี้ได้ทั้ง ไว และลูก ซึ่งจะเกิดกับความเป็นคนด้วยความหมายระหว่างทั้งสองที่สื่อสารOfType การจัดหมวดหมู่เหล่านี้เกิดขึ้นโดยให้แหล่งของการจัดหมวดหมู่เป็นสิ่งที่ช่วยสร้างความหมายของนามวลี ซึ่งจะได้มีการแผนของวัตถุที่เกี่ยวกับคำลักษณะของไทย (Delancey 1986; Placzek 1978) ซึ่งอาจเอื้อให้ที่ไม่มีการวิจัยที่ตัดตามการวิเคราะห์ที่สอดคล้องกับเรื่องนี้แบบลักษณะที่จะใช้เพื่อการดำเนินการจัดกลุ่มด้านความหมายและประโยค

ล่าสุดเราได้ทำการสำรวจว่าหมวดของไปและลูกก็สามารถด้วยการวิเคราะห์รูปแบบและตัวชี้วัดที่ LAKOFF (1987) ลำดับที่สอง ข้อมูลที่แสดงความเป็นคนด้านความหมายระหว่างไปและลูกเกิดขึ้นจากการวิเคราะห์รูปแบบและตัวชี้วัดที่น่าจะเห็นได้ในตอนที่ 1 และสุดท้าย คือตอนที่ 2 ของงานวิจัย (Inglis: ค้างเต็มพิมพ์) แสดงให้เห็นว่าการใช้คำลักษณะนี้ไม่ใช่เพียงเพื่อใช้ขยายค่าน้ำมันและคุณสมบัติของคำนามนั้น แต่ยังใช้ขยายความหมายของคำนามนั้น ด้วยเช่น รูปร่างและหน้าที่ หมายความว่าคำลักษณะนี้ไม่ได้เป็นหน่วยโยงหรือที่ไม่มีเหตุผลที่จะสร้างนำมาถือว่าได้ลูกตัวตามวิเคราะห์และถ่ายเป็นสู่หลักฐานด้านความหมายที่สำคัญที่ทำให้เห็นเช่นกันอย่างเดียวกัน เทียบได้กับความหมายโดยรวมของคำนาม บุคคลของคนไทยนั้นสืบสานโครงร่างของ Langacker (1991) โครงสร้างที่นี้นั้นต้องการโครงสร้างทางวิเคราะห์และความหมายเพื่อให้สำหรับการวิเคราะห์ได้ที่มุ่งเป้าหมายดินละคำหรือความหมายภายในความรู้ความเข้าใจทั่วไป เช่นการจัดโครงสร้างให้เป็นหมวดหมู่จากรูปแบบและการยอมรับซึ่งจะถูกผนวกโครงร่างประโยคที่นี้ใช้เพื่อแยกคุณสมบัติทางศาสตร์อย่างชัดเจนสำหรับปริมาณของคำนามภาษาไทย

การสำรวจในขณะนี้ทำให้เกิดขึ้น "การรวมกลุ่มที่ไม่ต้องเน้น" (Delancey 1986) ที่พบในภาษาสมัยใหม่ภาษาไทย แต่เป็นการชี้ให้เห็นถึงที่พิสูจน์การวิจัยในอนาคตด้วย เช่น การศึกษาลังคณิตศาสตร์วิวิธีการใหม่ที่ระบบที่ช่วยข้อมูลทางจะใช้เพื่อแยกหมวดหมู่ในสภาพของระบบนั้นที่ออกเป็นเครื่องหมายภาษาไทย หรือการศึกษาด้านกิจกรรมและความหมายของคำลักษณะอัน
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1. Introduction

As the term suggests, *numeral classifiers* (henceforth classifiers) have a twofold job description. Lexically, they classify or categorise the world for the culture that draws on them.Grammatically, they provide a means of counting or in other ways quantifying objects or things that they categorize. These roles are well documented (Allen 1977; Conklin 1981; Denny 1986; Haas 1942; Hundius and Kölver 1983; Jones 1970; Placzek 1978).

Part 1 of this research (Inglis 2000) capitalizes on insights from both Lakoff and Langacker to describe one facet of the lexical categories that Thai speakers exploit to talk about their world. In using Lakoff (1987: pp) as a methodological starting point, I will take a small slice of the Thai classifier system (namely *bay* / lûuk) as part of a base model, specify the central members for each category, distinguish important contrasts among central members, provide semantically motivated links between central and peripheral members of the category chain, and finally plot the different cognitive paths taken by each separate category to alternatively classify a subset of overlapping objects. These complex categories will then be viewed in terms of a schematic network along the lines of Langacker (1987: 369-386)¹, the purpose of which is to introduce *schema* as a necessary construct for going on to describe the grammatical structure of the classifier in Part 2 of this research (presented in this paper). This grammatical structure is not, however, purely syntactic but also conceptual. A central issue to this descriptive paper is that under a single theoretical framework, Cognitive Grammar offers an elegant account of both lexical and grammatical structure, accounting for a complex array of data characteristic of classifiers in general.
2. Establishing the constraints of classifiers

One of the points brought out in Part 1 of this research (Inglis 2000) regarding classifiers is to establish the polysemy that holds between the noun and a classifier. They are indeed related diachronically via a grammaticalization process (a classifier derives from a noun) and synchronically via extended relationships of association (a classifier for fruit is related to the classifier for monsoon). They share semantic features in such a way that the average Thai speaker can recognize.\(^2\)

Traditionally the job of quantification has mostly been analyzed in the literature as a purely syntactic construct bereft of meaning\(^3\) (Lehman 1979; Hundius and Kölver 1983). However, in this section I suggest that even in this highly syntactic context the classifier is a unit that has meaning. It is this intrinsic semantic conceptualization that holds for all classifiers characterizing it as a unified quantified semantic structure within the grammar.

Thai joins many other languages, especially within Mainland Southeast Asia, to make up the well-attested typology of numeral classifier languages. This is because in these languages a classifier is obligatory in expressions of quantity (Allen 1977: 286). These languages divide into two main groups as defined by the structure of noun phrases employing classifiers (Jones 1970: 3). Type I, the largest group (distributed geographically), has the pattern numeral-classifier-noun and includes Chinese and Vietnamese. The second group, Type II, patterns as noun-classifier-numeral and includes Thai and Burmese. When expanding the noun phrase to include adjectives and demonstratives five subtypes emerge as summarized from Jones (1970: 4-5) in Table 1.
Table 1. Noun phrase word order in Southeast Asian languages

<table>
<thead>
<tr>
<th>Type II A</th>
<th>Demonstr</th>
<th>Numeral</th>
<th>Classifier</th>
<th>Noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type II B</td>
<td>Noun</td>
<td>Numeral</td>
<td>Classifier</td>
<td>Demonst</td>
</tr>
<tr>
<td>Type II C</td>
<td>Noun</td>
<td>Demonstr</td>
<td>Numeral</td>
<td>Classifier</td>
</tr>
</tbody>
</table>

In all five subtypes it is significant that the numeral and classifier appear as a close-knit unit. This helps establish the classifier as an obligatory syntactic link between a noun and a numeral.4

2.1. Problems presented by classifiers

In (1), a simple quantified nominal with the noun teeŋmoo precedes the numeral-classifier constituent. Obligatory the classifier, lūuk, follows the quantifier but also bears a lexically marked schematic relationship to the noun based on some common feature(s) that embrace the entire category (see also Langacker 1991: 165).

1.  phó’m miti  teeŋmoo  sɔŋ  lūuk
   I have watermelon two clsf:round
   ‘I have two watermelons’

2.  khun miti  lūuk  kii  khon
   you have child how-many clsf:human
   ‘How many children do you have?’

3.  phó’m phùut  phāsāa  sɔŋ  phāsāa
   I speak language two clsf:language
   ‘I speak two languages’
The noun, therefore semantically elaborates the more schematic classifier. This schematization of the classifier plays a necessary role in the grammaticality of the expression.

In (2) however, *lûuk* functions as a noun and not as a classifier as in (1). These two discrete occurrences of *lûuk* are not arbitrary. That is, they are not homonymous but polysemous. Furthermore in (3) the noun, *phäasäa* ‘language’, also functions as its own classifier, *phäasäa* ‘clsf’. Here, a fully redundant relationship maintains between noun and classifier, as opposed to a schematic one. These constructs have been called ‘repeater classifiers’ and are well-attested in numeral classifier languages. Like the schematic classifiers, repeater constructions are not arbitrary. A close semantic relationship exists between a noun and its repeater classifier as a limiting case of schematicity. That is, the categorization judgement between the prototype and the variant for *phäasäa* ‘language’ is equal to zero. Classical analyses such as Hundius and Kölver (1983: 167), therefore would admit the difference of *lûuk* in (1) and (2) and the full redundancy of *phäasäa* in (3) by crucially appealing to word order. The noun always precedes the classifier in the nominal. I contend, however, that a grammatical theory should account for both the grammar and the lexical semantics since they obviously interact to compose the grammaticality of the nominal and therefore are crucial to a full understanding of the classifier phenomenon. Establishing the grammatical category of classifier in terms of word order does not account for the polysemic relationships found both within a single phrase, as in (3), and in separate unrelated clauses, as in (1) and (2). An analysis that can account for the grammar and
lexical semantics together in an elegant and intuitive fashion is preferred to one that cannot.

Examples (4) and (5) establish another important fact about classifiers. Classifiers have a semi-independent status as a unit reflected in anaphoric type phenomena (Downing 1986). This seems a likely occurrence if the classifier is indeed schematic to the noun.

(4) khun mii lāuk kii khon? sōŋ khon.
you have child two clsf:human two clsf:human
‘How many children do you have? (I have) two (children)’

(5) thīı ráan nāan khāalayın krābōoknāam yiu lāay bay
at store that sell bamboo-water-flask exist many clsf
‘At that store (they) sell many bamboo water flasks.’

thīk bay sūay
every clsf pretty
‘Each one is pretty.’

A careful analysis should elucidate the semi-independent relationship exhibited by such anaphoric usages.

2.2. Cognitive Grammar and the problems presented by classifiers

A Cognitive Grammar account highlights the importance, among other things, of semantic correspondences between component structures in building composite structures. Furthermore, lexicon and grammar form a continuum of symbolic structures from which to build these composite structures. This being so, Cognitive Grammar seems to offer a good theoretical foundation to account for the categorization stemming from polysemy and the quantifying role of classifiers.
The numeral ‘two’ is shown on the lower left in Figure 1 and follows from Langacker’s discussion of various construals of quantifiers in English (1991: 85).

Figure 1 The numeral-classifier composite

The numeral relates a bounded region, here the trajector, to some consecutive numerical scale, the landmark. This trajector/landmark construal represents a relational predicate because the relationship (interconnections) is in profile along with the scale and a bounded region. It is its relationship to a discrete scale that makes this trajector a bounded region. The bounded region represents the size or magnitude of a single replicate mass in terms of a definitive and consecutive numerical value. The profiled bounded region is the relational figure (trajector) that moves, expands or contracts, in direct relationship to its ground or landmark.
For all classifiers in numeral classifier languages generally and Thai specifically I posit the conceptualization found on the lower right in Figure 1. The classifier is an instantiating predication. It has a type specification that is schematic to the type of all nouns in the category based on some feature or shape (abbreviated F in the figure). This is the very elaboration relationship between the schema and its noun in Figure 1 above. The type is anchored to a single instance of that type located within a domain of instantiation (DOI). The instantiation comprises an unbounded region and is profiled. It is unbounded because no limit exists within its set of constitutive entities. The minimal designation is one. Here the profile of the classifier is specified with one entity and a broken line to indicate both the minimal designation and its unboundedness respectively. This contrasts with other potential instances shown with the dotted lines. All dotted line occurrences are not instantiated, that is, they have no specific location within the domain of instantiation. I propose that the classifier is inherently conceptualized for both functions, categorization and quantification, rather than just categorization alone. The reasons for this will be established with the data on adjectives and demonstratives in section 4.

Every classifier shares this quantifying conception but differs in regard to the categorizing function, depending on feature or shape. This is a good hypothesis from the diachronic perspective where in Chinese the evolution of a classifier proceeded from a noun to a measure term and on to the classifier (see Part 1 (Inglis 2000)). The measure term stage of development might have given rise to the quantification conceptualization for classifiers while at a later stage, the lexical conceptualization developed via schemas and their category extensions. The two component structures, ‘two’ and ‘clsf’, in Figure 1 share the same bounded region. This region, therefore, is in semantic correspondence, the classifier being schematic and the quantifier specific in regards to quantity. This
correspondence relates a strong valency because being profiles, both corresponding sub-
structures are salient. A general property of valence relations
states that correspondences virtually always equate highly prominent substructures in
the component predications (Langacker 1987: 361). The two component structures
integrate to form the composite structure, ‘two-clsf’ on the top in Figure 1. The heavy
line around the classifier box indicates that the classifier is the profile determinant. That
is, the profile of the classifier and not the adjectival numeral is inherited at the
composite level. The structure, ‘two-clsf’ is therefore nominal rather than adjectival.
This characterizes the classifier as the head in this construction. This composite
structure remains schematic in its type designation, F. The classifier is in fact the
schema in correspondence to its noun, be it prototypical or variant (Part 1 (Inglis 2000)).
This schematic relationship is described in Figure 2.

Figure 2 The nominal-classifier construction
Integration occurs between the type specification of the noun, here 'W' which stands for the full semantic detail of the noun 'watermelon' and the schematic specification of the numeral-classifier. The 'F' stands for a given 'feature' or conceptualization, such as 'fruit-like shape' in the case of lûuk. The schema elaborates the prototype or variant in the manner described in (Part 1 (Inglis 2000)). The composite structure, 'watermelon-two-clsf' on top in Figure 2 inherits the profile of the classifier construction which profiles a region in some domain that is anchored to a location within that domain. It is fully specified for size and lexical content, here 'two-ness' and 'watermelon-ness' respectively.

3. Cognitive Grammar addresses measure terms

Measure terms parallel classifiers on a number of counts. How does a Cognitive Grammar account present the similarities and differences? Consider (6) and (7).

(6) teegmoo sɔŋg lûuk
    watermelon two clsf:round
    'two watermelons'

(7) kaafee sɔŋg thûay
    coffee two meas:cup
    'two coffees'

In (7) thûay is a measure term and not a classifier in the categorizing sense of the word. A pure classifier categorizes a noun on the basis of some schematic feature or shape specification intrinsic to the noun. A measure term does not categorize the noun but quantifies it on the basis of some standard of measurement, such as a cup. A
watermelon is a kind of round object but coffee is not a kind of cup (Hundius & Kölver 1983: 167; Langacker 1991: 167). Measure terms quantify mass nouns while classifiers quantify count nouns. Hundius and Kölver (1983: 168), therefore make an appropriate generalization and call the quantifying function of these two types of classifiers *numeratives*. They restrict the term classifier to stand for the subset of numeratives that ‘constitute a network of lexically pre-established relationships with sets of count nouns’.

A grammatical theory should be able to account for the generalization of quantification (both count noun and mass noun) as well as the specialization of categorization, which is based on a count/mass distinction.

The numeral-classifier demonstrated in the composite structure in Figure 1 is redrawn on the left in Figure 3. The type specification has been enriched to characterize its internal structure, implied in Figure 1. The type designation is actually a type of a replicate mass. This mass has a specific feature characterization (F), which is instantiated and quantified by the classifier and quantifier respectively.

![Diagram](two-clsf)

![Diagram](two-cups)

**Figure 3** Quantified classifiers and measure terms
The ‘two-clsf’ composite structure thus profiles a single instance, the magnitude of which in this case is two entities (two-‘schematic things’). The numeral-measure construction, ‘two-cups’ on the right in Figure 3 is comparable. The type designation is a type of non-replicate mass but is characterized by a standard measure (M) in contrast to a feature or shape. Similar to a classifier, the measure term instantiates a single instance of a type, here a mass noun instead of a replicate mass noun. The mass noun is comprised of undifferentiated entities of its substance. When the measure term integrates with the quantifier the profiled instance is quantified with respect to a standard measure in the type designation. Just as certain count nouns are sanctioned by a classifier marked with a certain feature, so the mass noun is sanctioned by a measure term marked with an appropriate measurer (container) to the substance (cups of coffee, glasses of water, etc).

A Cognitive Grammar analysis thus shows that classifiers and measure terms are similar in internal conceptual structure by designating an instance of a type allowing quantification to take place. But they differ in terms of the kind of external conceptual structure they impose on a category. A count noun elaborates a schema based on a kind/type category, i.e., ‘W, ‘watermelon’, is a kind of F, ‘fruit-like-thing’. A mass noun, on the other hand, does not elaborate but associates to a schema according to what kind of measure can be used to measure it. Langacker has suggested that this could be interpreted as “referring to a schematically characterized mass whose volume is such that it would just fit in such a container” (1991: 167). The mass noun relationship would then be ‘coffee is a kind of M’ where M is mass whose volume would just fit into a given container. The container in this case is ‘cup’ and the magnitude of the volume
‘two cups’. Maintaining a schematic relationship to the noun in this fashion accounts for numeral-measure constructions functioning pronominally as in (8).

(8) khun aw kaafee kii thūay ? sōg thūay
you want coffee how-many cup two cup
‘How many cups of coffee do you want? Two cups.’

This is analogous to the anaphoric function found in the numeral-classifier construction in (4) and (5) discussed in section 2.1. Both numeral-classifier and numeral-measure constructs act anaphorically. This analysis explicitly states why this is the case. In both constructs a noun sustains a schematic relationship to its instantiating structure.

4. Cognitive Grammar addresses classifiers with adjectives and demonstratives

This analysis, employing the conceptualization of the classifier in Figure 1, becomes more important when giving an adequate account of adjectival usages. Consider the data in (9).

(9) a. chān hēn boon sīlūyaŋ
I see ball yellow
‘I see yellow balls’ [‘I see yellow ball-ness’]

b. chān hēn boon lāuk sīlūyaŋ
I see ball clsf yellow
‘I see yellow balls’

(10) a. chān hēn boon nīi
I see ball this
‘I see this/these ball(s)’

b. chān hēn boon lāuk nīi
I see ball clsf this
‘I see this ball’
Examples (9) and (10) illustrate a continuum of specificity in regard to the reference and quantity of the noun. The most general case, (9) a, refers to a very vague idea of yellow ball-ness. Regarding the two parameters of reference and quantity, it is vague. On the other hand, (9) b, while vague regarding reference, is more specific in quantity. Preferably it designates one object but is not restricted to marking a single object. In contrast, (10) a. employs a grounding predication, nǐ ‘this’, specifying definiteness. This refers to a ball specific to the speech act participants. In terms of reference it is specific while in quantity it remains vague. (10) b. is most specific containing a definite reference, nǐi ‘this’ and quantity, lùuk ‘one instance and no more’.

A continuum such as this is nicely accommodated within the present account of numeral-classifiers as in Figure 4 below.

![Diagram](image)

**Figure 4** Classifier with adjective and demonstrative
Figure 4 a. diagrams the adjectival examples in (9) a. and b. This reveals the optionality of the numeral-classifier in respect to a non-quantitative attribute, here 'yellow'. The occurrence of the classifier in (9) b. suggests that the classifier indeed is an instantiating predication. A quantity of at least one object is in view even though there is no overt numeral specifying the quantity of one. I claim that this construction receives this specification of one as a default via the classifier instead of the numeral (see also Hundius and Kölver 1983: 174).  

The example in (9) a. is diagramed in Figure 4 a. with the type description between a noun and adjective in mutual correspondence. This correspondence is represented with dashed lines in the figure. When the noun and adjective are integrated as in (9) a, the descriptive detail of the noun is enriched but reference and quantity are vague because these are contributions of a classifier and demonstrative which are absent in (9) a. When the noun and adjective are integrated with a classifier as in example (9) b, an instantiation within the domain of color results. This instantiation is the contribution of the classifier. In (9) b. the instantiation remains ambiguous regarding quantity because there is no overt numeral in the construction. When a numeral is absent, more often this suggests one entity. Recall that the internal semantic structure of the classifier (see Figure 1) already accounts for this default quantity of one with its profile specified for one entity and a broken line to indicate both the minimal designation and its unboundedness respectively. The example (9) b. reflects a domain of instantiation in color space. The specific instantiation referred to in the sentence is now elaborated as a specific color, yellow. In Figure 4 a, this is shown with the correspondence from the adjective to the type designation of the classifier instead of to the noun as in (9) a. The result is an instance of at least one entity fully specified for yellow.
The grounding predications in (10) are represented in Figure 4 b. A demonstrative such as *nī* ‘this/these’ is a grounding predication. A mental path from the speech act participants and a specific nominal has been established in the conceptualization designated by the demonstrative in the right-hand box of Figure 4 b. In the representation of the demonstrative construction, adapted from Langacker (1991: 92), the speech act participants (SP) represent the ground of the speech event. Its type designates more than one instance within its domain of instantiation. The speech act participants make mental contact with a specific instance. Following Langacker, the mental contact is indicated with a long dashed arrow instead of a solid arrow. This specific instance is selected against other potential instances and therefore is profiled. The semantic correspondence between the type designations of the demonstrative and the noun is highly significant. This allows an immediate compositional path between a noun and a demonstrative to compose grounded nominals as found in sentences like (10) a. This is shown in Figure 4 b. with the line of the noun corresponding with the type designation of the demonstrative. The classifier is then circumvented producing the example in (10) a. Here a specific ball known to the speaker and hearer is being selected for comment. However, since the demonstrative is schematic in quantity but specific in reference, sentences such as (10) a are likewise both quantitatively imprecise while being referentially specific. Therefore, when the speaker’s communicative goal is reference to a specific quantity, it is no wonder that a numeral-classifier is employed as in (10) b, reflected in Figure 4 b. with the classifier. Here a single specific ball is targeted in the minds of the speech act participants. The classifier (with its default conception of one object) together with the grounding predication designate a single instance whose entities consist of at least one.
A full nominal can be expressed, as illustrated in (11). These are nominals because they each contain at least one classifier.

(11) a. *boon lâuk sîlûay lâuk nîi*
ball  clsf  yellow  clsf  this
‘this yellow ball’

b. *boon lâuk sîlûay lâuk yâay lâuk nîi*
ball  clsf  yellow  clsf  big  clsf  this
‘this big yellow ball’

In (11), a classifier is used with each lexical item in the construction, domain notwithstanding. The feature characterization for each classifier remains constant (*lâuk*), therefore it is the same referent. The domains of color and quantity are invoked in (11) a, Whereas domains of color, size and quantity are invoked for (11) b. Under the Cognitive Grammar analysis these examples are treated the same way without the need to posit any further descriptive device. Thus, Figure 4 a. and b. can be collapsed to reveal a single noun, ‘ball’, with a classifier for each adjective and a demonstrative.

5. Conclusion: Toward a unified account of numeral classifiers

The Cognitive Grammar analysis proposed here reveals several important things about numeral classifiers which any theory should give account. Firstly, the numeral-classifier is the nominal head. This is supported by its behavior as a semi-independent structure from the noun. The numeral-classifier behaves pronominally in answer to questions or as an anaphoric reference to previously established nouns. Also, nominal heads are typically closely associated with number. Langacker has explained this in terms of plurality for English (1991: 145-146, 165). For a language such as Thai that does not
distinguish plurality in any noun marking, the primary location for registering quantity resides with the classifier within the numeral-classifier composite structure. This is supported by the strong distribution patterns across languages where the numeral-classifier represents an indivisible constituent against other constituents within the nominal.

Secondly, Cognitive Grammar accounts naturally for both classifier and measure terms as similar constructs by revealing that while they both sanction the quantification of nouns, they accomplish this via different categorizing strategies intrinsic to count and mass noun structure.

Thirdly, the classifier is an instantiating predication. As such, it has an affinity with numerals for making a close-knit numeral-classifier unit where quantification is required. It further acts to provide a default specification of a singular object where no overt numerals occur in the construction.

The classifier construction in numeral classifier languages exemplify a grammatical function in quantifying nouns and a lexical function in categorizing objects. Because Cognitive Grammar views lexicon and grammar as a continuum of symbolic units, the theoretical constructs employed to account for lexical categorization also account for grammatical quantification. In this way, the descriptive labor demanded by classifier phenomena is nicely accomplished with a rather economical set of conceptual constructs.

Notes

1 The two conceptual semantic approaches of Lakoff and Langacker have been nicely summarized and integrated by Palmer (1996: 91-98).
2 This is not to say that they recognize every classified noun. As the classifier extends to other domains and the relationship becomes more metaphorical, the
polysemy then might be lost on the conscious mind of the speaker, but a
semantic motivation remains along the lines of Lakoff (1987).

The exception is found in Langacker (1991: 164-167), where he briefly
posits a potential Cognitive Grammar account of the numeral classifier
phenomenon found in Mandarin Chinese. This indeed was the discussion that
launched my own research interest in Thai classifiers. The account in this
paper is more detailed but very much follows on the foundation established
by Langacker.

The term numeral has been used here from Jones (1970: 3). However, the
syntactic function described also pertains to other non-numeric quantifiers
such as some and several. As a result the more general term found in the
literature is quantifier.

I propose that it is this simple adjectival construal that combines with a Thai
classifier, while Langacker analyzes Chinese with a nominal construal of the
quantifier (1991: 85 and 166).

See Langacker (1991: 81-89) for a more detailed account of quantifiers.
The uninstantiated instances (dotted lines) might very well be part of the
conceptual base, especially in a grounded predication.

For a detailed discussion on the differences between a replicate mass noun and
a non-replicate mass noun see Langacker (1991: 78-81).

Certain count nouns (e.g. fruit) can be quantified by measure terms (e.g.
kilos). In this case the replicate mass noun loses its individuation and
becomes construed as just a mass. This mass in turn becomes quantified via a
standard of measurement.

This is a significant point in addition to Langacker’s conceptualization of a
classifier in his figure 4.5 (1991: 166). His conceptualization cannot account
for examples like (9) b, where no overt numeral exists in the construction
but where a definite quantity is understood specifically because of the
presence of the classifier, lău k.

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