A comparison of general classifiers in Tai-Kadai languages[*]

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Abstract

The paper aims to investigate the genuine general classifiers and the general classifiers which are derived from the 'round' classifiers in Tai-Kadai languages, namely, Bouyei (Buyi, Dioi), Sui (Shui), Hlai (Li), Northern Zhuang, Dai (Tai Lue), Shan, Lao, and Central Thai.

This study has found that there are three kinds of general classifiers in the Tai-Kadai languages. The first kind is genuine general classifiers which do not class the physical characteristics of objects. They include kai^{24} in Bouyei language; hom^{53} in Hlai language; and $ʔan$ in Northern Zhuang, Dai, Shan, Lao, and Central Thai languages. The second kind of general classifier is derived from shape/form classifiers which originally classed 'fruit' or sphericals. The third kind of general classifier has been extended from 'animal' domain to categorize various semantic fields, especially newly introduced items.

1. Introduction

A fundamental parameter that is used to classify entities in classifier languages is 'shape/form'. The shape/form parameter has traditionally been divided into the major dimensional subcategories of long (one-dimensional), flat (two-dimensional), and round (three-dimensional) (Allan 1977).

Besides the shape/form classifiers, many languages have a general classifier for items which are not physically classified. As pointed out by Barz and Diller (1985:173), "A 'general classifier' is used in some languages when a specific one is deemed inapplicable." The general classifier may be a genuine general classifier or derived from a shape/form classifier. Allan (1977:295) points out that "many languages have a classifier for round or saliently three-dimensional objects." The 'round' classifier has been extended to class a large number of objects and thus become a general classifier.

The languages of Tai-Kadai language family show an extended usage of classifiers that are originally used with fruit or spherical objects. The main focus of this paper, therefore, is to investigate the genuine general classifiers and the general classifiers which are derived from the 'round' classifiers in Tai-Kadai languages, namely, Bouyei (Buyi, Dioi), Sui (Shui), Hlai (Li), Northern Zhuang, Dai (Tai Lue), Shan, Lao, and Central Thai.

2.   Sources of data

The languages of Tai-Kadai language family which are under this study include Bouyei, Sui, Hlai, Northern Zhuang, Dai, Shan, Lao, and Central Thai. The number of informants and locations where the eight Tai-Kadai languages are spoken are as follows:

Table 1. Number of informants and locations

Languages	Locations	number of informants
Bouyei (Buyi/Dioi)	Zhenfeng County, Guizhou Province, PR China	1
Sui (Shui)	Sandu County, Guizhou Province, PR China	1
Hlai (Li)	Ledong Li Autonomous County, Hainan Province, PR China	2
Northern Zhuang	Hawyiengh, Mashan County, Guangxi Zhuang Autonomous Region, PR China	1
Dai (Tai Lue)	Xishuangbanna, Yunnan Province, PR China	6
Shan	Shan State, Union of Myanmar	1
Lao	Vientiane; Pakse, Champasak; Muang Khong, Salavan (Laos)	3
Central Thai	Bangkok (Thailand)	2

A list of 242 nouns was prepared for data collection. These nouns can be classified by a number of classifiers. This list was used for interviewing seventeen informants.[1] This study is limited in two respects, that is, the number

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    Central Thai: Miss Sukanya Krishnasreni and Mrs. Sujaritlak Deepadung
    Lao: Mrs. Bounheng Inversin, Mr. Bounpheng Sysamouth and Miss Duean Janthamat
    Dai (Tai Lue): Mrs. Zhang Qiushang, Mr. Xiangbing Yan, Mr. Suo Yan, Mr. Ha Yan, Mr. Long Yan, and Miss Jiao Yu.
    Shan: Phra Aggasena Laengtai
    Bouyei: Mr. Zhou Guoyan
    Northern Zhuang: Mr. Qin Xiaohang
    Kam: Mr. Daniel Yang
    Sui: Mr. Wei Xuecun
    Hlai: Mr. Wen Mingying and Mrs. Wen Jing
    Northern Thai (Lampang) Miss Aimkamon Boonme
    Southern Thai (Krabi) Miss Piyanan Thongkhamchum.

of informants, and nouns used for data collection. The data on Tai-Kadai languages spoken in PR China were collected from native speakers who are staff of the Kam-Tai Institute, Central University for Nationalities, Beijing, PR China. One or two native speakers represent one language. The data on Dai (Tai Lue) were collected both from a native speaker working at the Kam-Tai Institute and a group of native speakers who are studying in Chiangmai Province, Thailand. The Shan data were compiled from a native speaker who is a graduate student at Mahidol University. The data on Lao came from various sources. The main informant came from Muang Khong, Salavan, Laos to work in Bangkok. The other two informants are overseas Lao in the US. The data on Central Thai were collected from two native speakers of Central dialect. The list of nouns used in this study is based on the nouns used with a number of classifiers found in the Tai-Kadai dictionaries as listed in the references. Some classes of nouns may be limited especially the non-dimensional class.

3.   Theoretical framework

General classifiers can be used with entities of various semantic domains. The classification of the entities into different semantic domains is based on Adams and Conklin (1973) and Denny (1976). Most general classifiers are used with inanimates which are further subcategorized into shape/form and classificators. The shape/form classifiers have two subcategories, dimensional subcategory and non-dimensional subcategory. The dimensional subcategory consists of one-dimensionality, two-dimensionality and three-dimensionality. The non-dimensional subcategory classifies the objects with a prominent curved exterior or a hollow interior. The classificators are subcategorized into two groups, that is, nature/function and arrangement.

4.   Numeral noun phrase

Jones (1970) classifies the languages of Southeast Asia and South China into two large groups. The classification is based on the structure of noun phrases involving classifiers. The two groups are differentiated by the position of the head noun. The first group has the pattern Numeral-Classifier-Noun. The languages that use this pattern have the widest geographic distribution. Such languages are Chinese and Vietnamese therefore this group is referred to as 'Chinese type'. The second group employs the pattern Noun-Numeral-Classifier. It includes such languages as Thai and Burmese, so it is referred to as 'Southeast Asian type'. Barz and Diller (1985:177) add other languages into these two groups as follows:

Family	Numeral-Classifier-Noun	Noun-Numeral-Classifier
Sino-Tibetan	Chinese	Burmese, Lolo, Lisu
Austronesian	Malay, Cham	Javanese
Austro-Asiatic	Brou, Katu, Sedang	Mon, Khmer, Khmu'
Tai	Zhuang, Nung, Black and White Tai	Standard Thai, Lao, Shan, Tai-Ahom

The nine Tai-Kadai languages under this study can be grouped into 'Chinese type' and 'Southeast Asian type' as follows:

Chinese type (Numeral-Classifier-Noun)	Southeast Asian type (Noun-Numeral-Classifier)
Bouyei	Central Thai
Northern Zhuang	Lao
Sui	Dai
Hlai	Shan

5. The general classifiers in Tai-Kadai languages

5.1 Bouyei

There are two general classifiers in Bouyei, that is, kai^{24} and $\mathit{?dan^{33}}$. The former is a genuine general classifier and the latter is derived from a 'round' classifier. Besides serving as a general classifier, kai^{24} also has several functions. kai^{24} as a noun means 'rooster, hen' and as a verb means 'to affix'. It is also an auxiliary word used before a noun or an adjective as in the following sentence:

kai^{24} $la{:}u^4$ kai^5 ne^5 tu^3 $\mathit{?au^1}$
CLF   big   CLF   small   all   want
'Both the big ones and the small ones are in need.'
(Zhou Guoyan et al 2001: 237-238)

The general classifier kai^{24} is a classifier for measuring small inanimate objects and other inanimate objects which are not native as listed in Table 2.

Table 2. The classification of entities with the general classifier kai^{24}

Semantic fields	Entities classed by kai^{24}
like-shaped (spherical)	$jaŋ^{31}wa^{31}wa^{33}$ 'doll'
newly introduced	$hua^{24}thoŋ^{31}$ 'microphones', $kho^{24}tshun^{31}$ 'university course', $kue^{31}\ tɕa^{33}$ 'country'
long (one-dimensional)	vu^{31} 'reed of the loom'
non-dimensional	$tɕo^{35}vuŋ^{31}$ 'ring'
localities (functional)	$lu^{35}tɕau^{31}$ 'bridge', $ða{:}n^{31}miau^{11}$ 'temple', $lu^{35}ða{:}n^{31}$ 'house', $ða{:}n^{31}ne^{24}$ 'hut'
body part	$\mathit{?bai^{33}ði^{31}}$ 'ear', $soŋ^6pa^3$ 'mouth'

Most newly introduced items are Chinese loanwords and classed by the general classifier kai^{24}, e.g., $hua^{24}thoŋ^{31}$ 'microphones' and $kho^{24}tshun^{31}$ 'university course' and $kue^{31}\ tɕa^{33}$ 'country'.

ʔdan³³ can be used as a general classifier or a prefix of some nouns, e.g., *ʔdan³³ pai²* 'sore', *ʔdan³³ tuai⁴* 'rice bowl'. It originally categorizes fruit and round objects and has been vastly extended from the 'round' class to encompass a large number of inanimate entities within different semantic domains as shown in Table 3.

Table 3. Classification of entities with the general classifier *ʔdan³³*

Semantic fields	Entities classed by *ʔdan³³*
fruit	*luk¹¹ma³⁵* 'fruit', *ma³⁵ka:m³³* 'orange', *yok³⁵tɕuai³⁵* 'banana',
round (three-dimensional)	*tɕai²⁴kai²⁴* 'egg', *taŋ³³ŋuan³¹* 'sun', *ðoŋ¹¹ʔdian³³* 'moon', *ʔda:u³³ʔdi²⁴* 'star', *pau¹* 'ball', *tsuŋ³³* 'clock, watch'
like-shaped (spherical)	*lɯ³⁵taŋ³³* 'lamp', *lu³¹tsɿ⁴²* 'stove', *lɯ³⁵ma:u¹¹* 'hat', *tsɿ²⁴mu⁴²* 'character, letter', *jaŋ³¹ma⁴²tsɿ⁴²* 'numbers', *ya:p¹¹ʔjan³³* 'pack of cigarettes', *ðoŋ³¹* 'nest'
bulky	*po³³* 'mountain', *ðin³³ka³¹* 'stone mill'
container	*lɯ³⁵vu³³* 'bottle', *lɯ³⁵kuan²⁴* 'pot', *lɯ³⁵toŋ³⁵* 'bucket', *lɯ³⁵sa:n³⁵* 'cup', *lɯ³⁵tuai⁴²* 'bowl', *phin³¹tsɿ⁴²* 'jar', *lɯ³⁵vu³³* 'kettle', *ʔeŋ¹* 'vat', *lɯ³⁵ya:p¹¹* 'box', *lɯ³⁵tɕuŋ³¹* 'cage', *lɯ³⁵soŋ³³* 'small bag'
furniture	*lɯ³⁵kui¹¹* 'closet, cupboard', *lɯ³⁵sua:ŋ³¹* 'bed', *lɯ³⁵soŋ³¹* 'table', *taŋ²⁴koŋ²* 'chair'
flat (two-dimensional)	*lɯ³⁵ðaŋ³³* 'winnowing fan', *lɯ³⁵pa:n³¹* 'plate'
long (one-dimensional)	*suŋ²⁴ne²⁴* 'gun', *lɯ³⁵liaŋ³³* 'umbrella'
non-dimensional	*soŋ¹¹ka:m³⁵* 'hole'
localities (functional)	*lɯ³⁵tɕau³¹* 'bridge', *ða:n³¹miau¹¹* 'temple', *lɯ³⁵ða:n³¹* 'house', *ða:n³¹ne²⁴* 'hut'

The original 'round' classifier *ʔdan³³* has a metaphorical extension. It classes a large number of like-shaped objects, bulky objects, containers, and furniture. This classifier has been enhanced to cover other semantic components, that is, flat, long, non-dimensional and functional.

5.2 Sui

Sui has the general classifier *lam¹* which has the nominal meaning 'fruit'. This general classifier is originally the class for fruit. It encompasses a much larger domain of entities than the Bouyei *ʔdan³³*. It is organized as a category around a metaphorical extension from sphericals to a large number of entities within various semantic domains. It has been a powerful class and has become a general classifier. Out of 242 nouns in the wordlist, it classes 94 nouns as listed in Table 4.

Table 4. Classification of entities with the general classifier *lam^1*

Semantic fields	Entities classed by *lam^1*
fruit	*sui^{6}ko^6* 'fruit', *qaam^5* 'orange', *mu^{2}kwa^3* 'papaya', *çaaŋ^{3}tçau^3* 'banana'
round (three-dimensional)	*quk^{8}mom^6* 'fish ball', *tçhju^4* 'ball', *kai^5* 'egg', *zət^7* 'star', *tə^{1}van^1* 'sun', *njen^2* 'moon', *tsuŋ^3* 'clock, watch', *ŋui^6* 'pimple'
like-shaped (spherical)	*teŋ^5* 'lamp', *lu^2* 'stove', *mau^6* 'hat', *kuŋ^1* 'nest', *ʔma^{1}tçwan^{6}sin^{3}tshai^1* 'head of cabbage', *ʔma^{1}yo^{5}sən^6* 'head of lettuce', *to^2* 'garlic', *nu^{4}zən^{1}maŋ^4* 'doll', *tsi^{1}mu^6* 'character', *su^{1}tsi^1* 'number'
bulky	*nu^2* 'mountain', *pja^1* 'rock', *muə^2* 'stone mill', *çuŋ^2* 'loom'
container	*phin^4* 'bottle', *tsuŋ^1* 'cup', *tui^4* 'bowl', *yaam^5* 'jar', *po^2* 'pot', *pən^2* 'basin', *toŋ^3* 'bucket', *sau^{1}le^1* 'bag', *peŋ^{2}nam^3* 'kettle', *ho^{2}tsi^6* 'box'
furniture	*hi^3* 'table', *ʔun^1* 'chair', *kui^6* 'closet, cupboard', *yu^2* 'cage', *mai^4* 'coffin', *taau^2* 'bed'
newly introduced	*tsi^{2}tha^3* 'guitar', *lu^{2}jin^{3}tçi^3* 'tape recorder', *fa^{1}tuŋ^4* 'microphone', *tsau^{1}çaaŋ^{1}tçi^3* 'camera', *səu^{3}jin^{3}tçi^3* 'radio', *tjen^{1}nau^6* 'computer', *yaan^2* 'household, family', *kho^{1}tshən^4* 'university course'
literary	*pi^{2}tçi^{1}pən^6* 'notebook'
long (one-dimensional)	*ku^{3}li^2* 'plowshare', *mai^{4}swa^2* 'brush', *ja^{4}swa^2* 'toothbrush', *kum^1* 'pestle', *tjum^{1}haan^5* 'umbrella', *mai^{4}pjet^7* 'pen', *mai^{4}pjet^{7}tshen^{3}pi^2* 'pencil', *hət^8* 'tail', *tsui^2* 'hammer', *tsuŋ^{5}sau^{6}tshaŋ^3* 'gun'
flat (two-dimensional)	*pən^5* 'winnowing fan', *tjə^2* 'plate', *mjen^2* 'quilt', *to^1* 'door', *to^{1}faaŋ^1* 'window'
non-dimensional	*qaam^1* 'hole', *fin^1* 'ring'
localities	*yan^{2}fe^{4}ka^{4}tsjeŋ^5* 'theater, cinema', *nu^{2}ʁaau^{3}haai^3* 'island', *si^2* 'temple', *tçeu^2* 'bridge'
body parts	*vjən^1* 'tooth', *^{n}da^1* 'eye', *qha^1* 'ear', *qo^4* 'throat', *ha^1* 'shoulder', *paak^7* 'mouth', *mjə^1* 'hand (one)', *tin^1* 'foot (one)', *ʔna^3* 'face', *ku^3* 'head', *te^{3}tak^7* 'breast', *taan^{3}tau^1* 'shadow'
vehicles	*fui^{3}tçi^3* 'airplane', *tshə^{3}po^4* 'oxcart', *tshə^3* 'car', *thsə^3* 'bus', *tshu^{2}tsu^{3}tshə^3* 'taxi', *lwə^1* 'boat'
plants	*mai^{4}ji^1* 'palm tree', *mai^4* 'log', *taau^4* 'bamboo shoot'

5.3 Hlai

Hlai has one general classifier, i.e., *hom^{53}*. This general classifier takes a large range of inanimates from the smallest size object 'grain' to the

bulky size object 'mountain'. There are 87 nouns which are classified by *hom*[53] as listed in Table 5.

Table 5. Classification of entities with the general classifier *hom*[53]

Semantic fields	Entities classed by *hom*[53]
fruit	*tshom^{53}tshai^{53}* 'fruit', *tsho:m^{53}kai^{53}kit^{55}* 'orange', *ʔai^{53}tshai^{53}* 'papaya', *phu^{11}tha:u^{11}* 'grape', *hwe:k^{55}* 'banana', *hu^{11}tsi:u^{55}* 'chili pepper'
round (three-dimensional)	*pok^{55}* 'grain, granular', *fan^{53}* 'seed', *zu:n^{11}* 'pill', *vut^{55}* 'pimple', *ha:i^{11}puɯ^{53}hwe:ŋ^{11}* 'mole', *tsi:n^{55}tu^{55}* 'pearl', *zu:n^{11}ɬa^{53}* 'fish ball', *khi:u^{11}* 'ball', *zɯ:m^{53}khai^{53}* 'egg', *ra:u^{53}* 'star', *tsha^{53}hwan^{53}* 'sun', *n̩a:n^{53}* 'moon', *tsi:ŋ^{55}; bi:u^{11}* 'clock, watch'
like-shaped (spherical)	*tsi:u^{55}; deŋ^{55}* 'lamp', *lu^{53}* 'stove', *plu:t^{55}; ma:u^{55}* 'hat', *ru:k^{55}* 'nest', *beɯ^{53}ta:i^{11}lua^{11}* 'head of cabbage'
bulky	*gaŋ^{53}; hwau^{11}* 'mountain', *tshi:n^{53}* 'stone', *tshi:n^{53}* 'rock', *ploŋ^{11}tsɯ^{55}ka:n^{55}tshi:n^{53}* 'stone mill'
container	*lau^{53}li^{53}* 'bottle', *kok^{55}; tsi:ŋ^{11}* 'cup', *ʔua:u^{53}* 'bowl', *lau^{53}li^{53}va^{11}pam^{11}* 'jar', *kai^{53}* 'pot', *ʔe:ŋ^{55}; phu:n^{11}* 'basin', *tha:ŋ^{53}nam^{11}* 'bucket', *kɯ^{55}de:t^{53}* 'bag', *tui^{11}hu^{11}* 'kettle', *hop^{55}* 'box', *li:k^{55}; rok^{55}* 'cage'
furniture	*tsho^{53}; to:ŋ^{11}* 'table', *tsau^{55}* 'closet, cupboard'
newly introduced	*ki:t^{55}tha^{55}* 'guitar', *lok^{55}ʔi:m^{55}ki^{55}* 'tape recorder', *ʔu:i^{55}da:ŋ^{11}* 'microphone', *ki:p^{55}ti:u^{11}ki^{55}* 'camera', *tiu^{55}ʔi:m^{55}ki^{55}* 'radio', *ti:n^{55}na:u^{11}* 'computer', *khwa^{11}tsheŋ^{11}* 'university course', *kɯ^{11}phi:u^{11}* 'stock', *ploŋ^{11}* 'household, family'
flat (two-dimensional)	*tshaŋ^{11}phi:n^{11}* 'disk', *doŋ^{11}rau^{53}* 'winnowing fan', *ʔua:u^{53}lai^{55}* 'plate', *tshom^{53}* 'door', *fiu^{55}ploŋ^{11}* 'window'
long (one-dimensional)	*ban^{55}* 'chisel', *tsɯ^{55}lun^{53}* 'axe', *tho^{55}keŋ^{55}* 'spoon', *lai^{55}* 'plough'
non-dimensional	*tshu:ŋ^{11}* 'hole', *tsɯ^{55}lo:p^{55}zi:ŋ^{55}* 'ring'
localities	*ploŋ^{11}* 'house', *ʔen̩^{55}ploŋ^{11}* 'hut', *ploŋ^{11}vu:k^{55}hi^{11}* 'theater, cinema', *ploŋ^{11}gop^{55}gwau^{11}* 'barbershop', *da:u^{11}* 'island', *ploŋ^{11}but^{11}* 'temple'
body part	*tsɯ^{55}li:p^{55}* 'nail', *fan^{53}* 'tooth', *tsha^{53}* 'eye', *pam^{11}* 'mouth', *daŋ^{53}* 'face', *gwau^{11}* 'head', *khe:ŋ^{11}, fan^{11}* 'breast', *tsɯ^{55}hjau^{11}* 'shadow'
plant	*tshe:ŋ^{53}* 'flower', *det̩^{55}* 'mushroom'

Some objects may be classified with *hom*[53] and other classifiers as listed in Table 6.

Table 6. Classification of entities with the general classifier hom^{53} and specific classifiers

Semantic fields	classifiers	entities
like-shaped (spherical)		
lump	$hom^{53}/$ thun^{53} $hom^{53}/$ ruːk^{55}	$daːu^{55}hu^{55}$ 'tofu' $hoːp^{55}za^{53}$ 'pack of cigarettes'
container	$hom^{53}/$ka^{11}	$tshai^{53}koŋ^{55}$ 'coffin'
long	hom^{53} /dan^{55} $hom^{53}/$ gwau^{11} $hom^{53}/$ ka^{11} $hom^{53}/$ fiːn^{11}	$tshop^{55}tshun^{53}$ 'rainbow' $gwau^{11}lai^{55}$ 'plowshare' $tsɯ^{55}gop^{55}liːp^{55}$ 'nail clipper' rik^{55} 'harrow, rake'
flat	$hom^{53}/$ van^{11}	$tsiːu^{5}phiːn^{11}$ 'photograph' $bo^{55}tua^{11}$ 'newspaper'
plant	hom^{53} / ka^{11}	$ka^{11}tsɯ^{55}hjau^{53}$ 'pod'

The classifiers that are used interchangeably with the general classifier hom^{53} are mostly shape/form classifiers.

The classifier dan^{55} refers to its nominal meaning 'twig, thread, string, wire'. It originally classes long flexible items and has been extended to class like – shaped objects such as $doːi^{53}$; ban^{53} 'rope', $doːi^{53}noːŋ^{53}$ 'belt', $khoːn^{11}hja^{55}$ 'towel', za^{11} 'river', and $kuːn^{53}$ 'road'.

The classifier $thun^{53}$ is a classifier for lump-shaped objects such as gam^{11}; mam^{55} 'a piece of meat'.

The classifier $gwau^{1}$ classes long inflexible objects such as $tsɯ^{55}gop^{55}$ 'scissors', $tsɯ^{55}ra^{53}fan^{53}$ 'toothbrush', and $taːn^{55}$ 'umbrella'.

The classifier ka^{11} has its nominal meaning 'knife and sword'. It is a classifier for 'stick-like' objects such as $tsɯ^{55}dui^{53}goːi^{53}$ 'hammer', $tshiu^{11}tshiːu^{55}$ 'gun', and $tsɯ^{55}gop^{55}liːp^{55}$ 'nail clipper'. It has been expanded to class bulky objects and vehicles such as $theːŋ^{55}$; $zaːŋ^{55}$ 'bed', $ʔeɳ^{55}va^{53}$ 'boat', and $va^{53}beɳ^{53}$; $buːi^{55}ki^{55}$ 'airplane'.

The classifier van^{11} has its nominal meaning 'leaf, page'. It classes 'sheet-like' objects such as $phiːu^{11}$ 'ticket', $ʔuːi^{55}$ 'painting' and $tshia^{11}$; $tshi^{11}$ 'paper'.

The classifier $fiːn^{11}$ means 'handle'. It classes instruments with a long handle.

The classifier $ruːk^{55}$ is originally a noun which means 'nest'. It classes $ruːk^{55}$ 'nest' as a repeater and classes other objects such as $tiːn^{55}$ 'letter'.

5.4 Northern Zhuang

Northern Zhuang has one general classifier, i.e., $\textit{ʔan}^{24}$. This classifier has been widely used for entities within various semantic fields. It classes 87 nouns of any sizes as listed in Table 7.

The classifiers which are used for round entities have not been developed to be a general classifier. Such classifiers are $\textit{ŋvei}^{21}$, $\textit{nat}^{21}$, and $\textit{ɕe}^{21}$. These three classifiers class similar objects. The classifier $\textit{ŋvei}^{21}$ is from the root 'pit or core of a fruit'. It classes small and round entities as a bean, pearl, grain, and pill. The classifier $\textit{nat}^{21}$ refers to its nominal meaning 'grain, granular'. It is used as a repeater for grain, granular and other like-shaped objects such as pills and seeds. The classifier $\textit{ɕe}^{21}$ has its nominal meaning 'seed and fruit pit'. It also classes small and round things such as 'chili pepper, grain, granular, and eye'.

Table 7. Classification of entities with the general classifier $\textit{ʔan}^{24}$

Semantic fields	Entities classed by $\textit{ʔan}^{24}$
fruit	$\textit{ma:k}^{44}$ 'fruit', $\textit{luuk}^{21}\textit{ka:m}^{24}$, 'orange', $\textit{mok}^{21}\textit{kva}^{24}$ 'papaya', $\textit{ma:k}^{44}\textit{ʔit}^{55}$ 'grape', $\textit{kjo:i}^{55}\textit{ho:m}^{24}$ 'banana'
round (three-dimensional)	$\textit{ʔda:u}^{24}\textit{ʔdei}^{44}$ 'star', $\textit{ta:ŋ}^{24}\textit{ŋon}^{42}$ 'sun', $\textit{yo:ŋ}^{21}\textit{ʔduu:n}^{24}$ 'moon', $\textit{ji:n}^{42}\textit{pja}^{24}$ 'fish ball', $\textit{kiu}^{42}$ 'ball', $\textit{kjai}^{44}$ 'egg', $\textit{ɕau}^{42}$ 'pimple', $\textit{yei}^{24}$ 'mole', $\textit{ɕauu}^{24}$ 'pearl', $\textit{ɕuŋ}^{24}$; $\textit{pe:u}^{55}$ 'clock, watch'
like-shaped (spherical)	$\textit{taŋ}^{24}$ 'lamp', $\textit{ja:ŋ}^{42}\textit{va}^{33}\textit{va}^{33}$ 'doll', $\textit{θo}^{44}$ 'number', $\textit{ha:p}^{21}\textit{ʔi:n}^{24}$ 'pack of cigarettes', $\textit{θau}^{44}$ 'stove', $\textit{ma:u}^{21}$ 'hat', $\textit{yoŋ}^{42}$ 'nest'
bulky	$\textit{pja}^{24}$ 'mountain', $\textit{ya:n}^{42}\textit{mu}^{21}$ 'stone mill', $\textit{ʔan}^{24}\textit{tam}^{55}\textit{yo:k}^{44}$ 'loom'
container	$\textit{pi:ŋ}^{42}$ 'bottle', $\textit{je:n}^{55}\textit{kiŋ}^{24}$ 'glasses', $\textit{ɕe:n}^{55}$ 'cup', $\textit{va:n}^{55}$ 'bowl', $\textit{piŋ}^{42}\textit{pa:k}^{44}$ $\textit{kva:}$ $\textit{ŋ}^{44}$ 'jar', $\textit{ʔbon}^{55}$ 'pot', $\textit{pa:t}^{44}$ 'basin', $\textit{toŋ}^{55}$ 'bucket', $\textit{tai}^{21}\textit{θauu}^{44}$ 'bag', $\textit{hu}^{42}\textit{yam}^{33}$ 'kettle', $\textit{ha:p}^{21}$ 'box', $\textit{loŋ}^{42}$ 'cage', $\textit{pe:n}^{55}$ 'coffin'
furniture	$\textit{ta:i}^{42}$ 'table', $\textit{ʔei}^{55}$ 'chair', $\textit{yiŋ}^{55}$ 'closet, cupboard', $\textit{ɕo:ŋ}^{42}$ 'bed'
newly introduced	$\textit{ki}^{42}\textit{ta}^{33}$ 'guitar', $\textit{lu}^{42}\textit{jin}^{33}\textit{ki}^{33}$ 'tape recorder', $\textit{va}^{21}\textit{toŋ}^{42}$ 'microphone', $\textit{ɕa:u}^{21}\textit{θi:ŋ}^{42}\textit{ki}^{33}$ 'camera', $\textit{θou}^{33}\textit{jin}^{33}\textit{ki}^{33}$ 'radio', $\textit{te:n}^{42}\textit{na:u}^{55}$ 'computer', $\textit{ya:n}^{42}$ 'household, family'
flat (two-dimensional)	$\textit{ɕa:}$ $\textit{ŋ}^{42}\textit{pe:n}^{42}$ 'disk', $\textit{ɕuŋ}^{33}\textit{la:}^{42}\textit{pa:n}^{55}$ 'plank', $\textit{yaŋ}^{24}$ 'winnowing fan', $\textit{pu:n}^{42}$ 'plate', $\textit{tou}^{24}$ $\textit{ɕu:ŋ}^{24}$ 'window', $\textit{ʔan}^{24}\textit{tai}^{44}\textit{mum}^{21}$ 'shaving razor blade', $\textit{yi:p}^{44}$ 'mosquito net'

Table 7. (Continued) Classification of entities with the general classifier $ʔan^{24}$

Semantic fields	Entities classed by $ʔan^{24}$
long (one-dimensional)	$ɕu^{42}$ 'axe', $ɣa:u^{24}$ 'harrow, rake', $pe:u^{42}ke:ŋ^{24}$ 'spoon', $kuŋ^{55}hu:t^{44}$ 'bow', $li:ŋ^{55}$ 'umbrella', tik^{21} 'flute', $fɯ:^{42}$ 'reed of the loom'
vehicle	$fei^{33}ki^{33}$ 'airplane', $ɕi^{24}tu^{42}ki:ŋ^{21}$ 'car', $kuŋ^{33}$ $kuŋ^{24}ki^{24}ɕe^{33}$ 'bus', $ɕi^{24}ki^{24}ɕe:ŋ^{42}$ 'taxi', $ɣu^{42}$ 'boat'
non-dimensional	$ɕo:ŋ^{21}$ 'hole', $lit^{55}fɯŋ^{42}$ 'ring'
localities	$ɣa:n^{42}$ 'house', $ɣa:n^{42}ʔi^{44}$ 'hut', $fu:ŋ^{42}$ 'room', $ɕi^{24}je:n^{24}$ 'theater, cinema', $pou^{44}fei^{24}kjau^{55}$ 'barbershop', $ta:u^{55}$ 'island', $mi:u^{21}$ 'temple'
body parts	$ɣɯ^{42}$ 'ear', ho^{42} 'throat', $ʔba^{44}$ 'shoulder', $pa:k^{44}$ 'mouth', $kjau^{55}$ 'head', $tai^{55}ha:i^{42}$ 'sole of the foot', $ʔak^{55}$ 'breast', $θei^{24}$ 'corpse'
plant	$ɣat^{55}$ 'mushroom'

The classifier $ʔan^{24}$ may be replaced by other specific classifiers as exemplified in Table 8.

Table 8. Classification of entities with the general classifier $ʔan^{24}$ and other specific classifiers

Semantic fields	classifiers	entities
like-shaped (spherical)	$ʔan^{24}$, $ɕi^{21}$	$θaɯ^{24}me^{21}$ 'character, letters'
long	$ʔan^{24}$, $fa:k^{21}$	$pa:u^{21}$ 'plane'
flat	$ʔan^{24}$, $fa:n^{24}$	$mu:ŋ^{33}$ 'fishing net'
body part	$ʔan^{24}$, fa^{55}	na^{55} 'face'

The classifier $ɕi^{21}$ has its nominal gloss 'word, character'. It is used as a repeater for classing 'word and characters'. The classifier $fa:k^{21}$ classes 'tools' such as $li:m^{42}$ 'sickle', $ɕa:m^{33}$ 'chisel', $ki:m^{44}$ 'sword', and $ɕik^{55}$ 'ruler'. The classifier $fa:n^{24}$ is used with flat objects such as $ɕi:n^{24}$ 'carpet', $ʔbin^{55}$ 'mat', $te:n^{42}$ 'quilt' and $fa:n^{24}ta:n^{24}$ 'bed sheet'. fa^{55} classifies 'face, palm or sole (of the foot), wall, and layer of honeycomb', e.g., $fa^{55}tin^{24}$ 'sole (of the foot) and $fa^{55}fɯŋ^{42}$ 'hand'.

5.5 Dai

The Dai language has the general classifier $ʔan$ which classes small entities and newly introduced items as listed in Table 9.

Table 9. Classification of entities with the general classifier *ʔan*

Semantic fields	Entities classed by *ʔan*
lump	*kap⁷se⁷²lek⁸* 'cigarette (pack)'
long (one dimensional)	*kɛn¹* 'axe', *mai⁴si¹* 'brush', *mai⁴si¹xeu³* 'toothbrush', *mɛ⁶sɛm²tɛt⁷lep⁸* 'nail clipper', *vi¹* 'comb', *kɛn¹but⁷* 'pestle', *tsɔn⁴* 'spoon', *vɛn⁶ta¹* 'spectacles', *pi³pa:k⁹ka¹* 'pen', *pi³ta:n⁵* 'pencil', *pi⁵* 'flute', *soi¹* 'reed of the loom', *lə⁶* 'saw'
newly introduced items	*tsak⁷ʔat⁷sɛŋ¹* 'tape recorder', *kɔŋ³xva³tuŋ²* 'microphone', *kɔŋ³thɔt⁹puŋ⁵* 'camera', *səu⁶jin⁶ji⁶* 'radio'

In addition to the general classifier *ʔan*, Dai has the round classifier *noi⁵* which originally classed fruits. This round classifier has been extended to class items within a wide range of semantic fields therefore it can be predicted that this classifier will become another general classifier in the same way as the Lao cognate *nūay*. The entities classed by *noi⁵* is listed in Table 10.

Table 10. Classification of entities with the general classifier *noi⁵*

Semantic fields	Entities classed by *noi⁵*
fruit	*ma:k⁹sum³luuk⁸va:n¹* 'fruit', *ma:k⁹tsuk⁷* 'orange', *ma:k⁹kui³sa⁷¹pau⁷¹* 'papaya', *kui³hɔm¹* 'banana (one piece)', *ma:k⁹phik⁸nɔi⁴* 'chili pepper'
round (three dimensional)	*siu¹* 'pimple', *fai¹* 'mole', *luk⁸lɔm⁶pa¹* 'fish ball', *ma:k⁹lum²* 'ball', *xai⁵kai⁵* 'egg', *da:u¹* 'star', *ta¹van²* 'sun', *dən¹* 'moon', *na³li⁵loŋ¹* 'clock, watch'
like-shaped (spherical)	*fai²fa⁴* 'lamp', *kɔŋ³kɛu³loŋ¹* 'hat'
bulky objects	*hin¹pha¹* 'rock', *dɔi¹kɔŋ²* 'mountain', *mɔ⁵* 'stone mill'
containers	*kɔŋ²* 'bottle', *kɔŋ³kɛu³* 'cup', *va:n⁵* 'bowl', *din¹sa⁷²ta:i²* 'jar', *ʔɔm¹* 'pot (cooking)', *ma²la²* 'basin', *mɔ³tuŋ²* 'bucket', *thuŋ¹*; *ta:i⁵* 'bag', *nam⁴tun³* 'kettle', *xoŋ¹* 'cage', *kon¹* 'coffin', *kap⁷*; *ʔɛp⁷* 'box'
furniture	*tsɔ³* 'table', *taŋ⁵kuŋ¹* 'chairs', *lim⁴* 'closet, cupboard'
literary	*pɔp⁸* 'book', *pɔp⁸fət⁷hat⁷* 'notebook (to write on)'
flat (two-dimensional)	*xuŋ¹* 'winnowing fan', *pa:n⁴*; *pən¹* 'plate'
non-dimensional	*tsɔp⁹muɨ²* 'ring'
localities	*kɔ⁷¹dɔn¹* 'island'
plant	*tho⁵* 'pod'

5.6 Shan

Shan has the general classifier *ʔan¹* which classes objects of any size ranging from small objects such as *na:m¹* 'thorn' to bulky objects such as *mɔ:²* 'stone mill'. Table 11 shows the nouns that are used with *ʔan¹*.

Table 11. Classification of entities with the general classifier *ʔan²⁴*

Semantic components	Entities classed by *ʔan²⁴*
like-shaped (spherical)	*pʰi:⁵faj⁴* 'stove'
bulky	*mɔ:²* 'stone mill', *huk²* 'loom'
container	*kʰɔ:k³* 'cage', *kɔ:m²* 'coffin'
furniture	*pi:²tu:²* 'closet, cupboard'
newly introduced goods	*mɛk⁵* 'microphone', *kɛm²ma:²la²* 'camera'
long (one dimensional)	*taw²le:⁴* 'plane', *ki:m⁴haj⁴* 'scissors', *pa⁵lat⁵* 'brush', *ma:j⁵si:¹kʰew³* 'toothbrush', *nɛp²kɛt⁴* 'nail clipper', *wi:¹ho¹* 'comb', *ta:p³ta:⁴* 'harrow, rake', *sa:k²* 'pestle', *pɔ:t⁴maj⁵* 'small stick', *ma:n²ta:¹* 'spectacles', *na:m¹* 'thorn', *ka:ŋ²* 'bow', *pi:²* 'flute', *hoŋ⁴haj⁴* 'rainbow'
flat (two dimensional)	*loŋ³* 'winnowing fan', *hɛ¹* 'fishing net'
localities	*kʰo¹* 'bridge'
body part	*kʰɔ:⁴* 'throat', *kɔŋ⁵ŋaw⁴* 'shadow'

Besides *ʔan¹* Shan has the classifier *hoj²* for round objects. This classifier is in the process of becoming another general classifier. It has been extended from 'round' class to encompass newly introduced goods as listed in Table 12.

Table 12. Classification of entities with the general classifier *hoj ²*

Semantic fields	Entities classed by *hoj ²*
round (three dimensional)	*ma:k²pʰit⁵* 'chili pepper', *law¹* 'star', *ta:¹wan⁴* 'sun', *lən¹* 'moon', *kɔ:k⁴faj⁴* 'lamp'
container	*ŋɔ:j⁴* 'kettle'
newly introduced	*ki:²ta:²* 'guitar', *ca:k³ti:⁵seŋ¹* 'tape recorder', *ʔɔm¹lo:m⁴* 'radio', *kɔm²pju:²ta:²* 'computer'
body part	*ta:¹* 'eye'

The classifier *hoj²* can be used interchangeably with *luk³* for 'fruit, rock, and egg' as listed in Table 13.

Table 13. Classification of entities with the classifiers *hoj ²* and *luk³*

Semantic fields	Entities classed by *hoj²/luk³*
fruit	*ma:k²maj⁵* 'fruit', *ma:k²cɔ:k⁴* 'orange', *ma:k²saŋ⁴pʰɔ:⁴* 'papaya', *ma:k²it²* 'grape'
round (three dimensional)	*kʰaj²* 'egg'
bulky objects	*ma:kʰin¹* 'rock'

Besides *luk³* the classifier *hoj²* can also replace *kɔn³* which classes lumpy and bulky objects as seen in Table 14.

Table 14. Classification of entities with the classifiers *hoj²/kɔn³*

Semantic fields	Entities classed by *hoj²/kɔn³*
lump	*tʰo²pʰu:⁴* 'tofu'
bulky	*ma:k²hi:n¹* 'stone', *mɔ:k²ku:m³* 'cloud'

Besides being used interchangeably with *hoj²* for round objects such as 'fruits' and 'eggs', the classifier *luk³* has been extended to class other objects as listed in Table 15.

Table 15. Classification of entities with the classifier *luk³*

Semantic fields	Entities classed by *luk³*
fruit	*koj³hɔ:m¹* 'banana'
round (three dimensional)	*luk³cin⁵pa:¹* 'fish ball', *ma:k²naŋ¹* 'ball', *na:²ri:¹* 'clock, watch'
like-shaped (spherical)	*mo:k²ho¹* 'hat'
bulky	*lɔy¹* 'mountain'
container	*ʔum¹nam⁵* 'jar', *mɔ:³* 'pot', *ʔa:ŋ²* 'basin', *toŋ¹* 'bag', *tək³* 'box'

It should be noted that 'banana' is not put into the *hoj²* class but the *luk³* class. Comparing the use of *luk³* with *hoj²*, *luk³* still classes objects within the 'round' domain whereas *hoj²* has been extended from the 'round' component to encompass newly introduced objects such as electrical appliances.

5.7 Lao

Lao has the general classifier *ʔăn* which can class objects as small as a 'thorn' and as large as a 'coffin' as seen in Tables 16 and 17.

Table 16. Classification of entities with the classifier *ʔăn*

Semantic fields	Entities classed by *ʔăn*
like-shaped (spherical)	*tā kĭaŋ* 'lamp'
flat (two dimensional)	*mîit thææ̆* 'shaving razor blade'
long (one dimensional)	*pæ̆æŋ* 'brush', *pæ̆æŋ thŭu khææ̆w* 'toothbrush', *mîit tăt lêp* 'nail clipper', *sàak* 'pestle', *mây* 'stick' (small), *năam* 'thorn', *khăn cɔ̂ŋ/ khăn hōm/khăn ɲŭu* 'umbrella', *khŭy* 'flute', *kā sŭay* 'reed of the loom', *kŏp* 'plane', *kĩaw* 'sickle', *sīw* 'chisel', *dàap* 'sword', *sûan; màak cŏk* 'plowshare', *mây băn thât* 'ruler', *mây khɔ̂ɔn* 'hammer'
newly introduced	*khŭaŋ ʔăt sĭaŋ* 'tape recorders', *mît khŏo fŏon* 'microphones', *kɔ̂ɔŋ thāay hûup* 'camera'

The general classifier *ʔăn* can be used interchangeably with specific classifiers which are mostly shape-based classifiers and repeaters as shown in Table 17.

Table 17. Classification of entities with the classifier *ʔăn* and other specific classifiers

Semantic fields	classifiers	entities
like-shaped (spherical)	*toŏ, ʔăn*	*tùk kā tăa* 'doll'
bulky	*nūay, ʔăn*	*khôk* 'mortar', *môo* 'stone mill'
container	*thŏŋ (repeater), ʔăn nūay, lŏoŋ (repeater), ʔăn*	*thŏŋ* 'bag' *lŏoŋ* 'coffin'
furniture	*nūay, ʔăn*	*tò* 'table', *tāŋ* 'chairs'
newly introduced	*nūay, ʔăn*	*kĭi tâa* 'guitars', *wĭ thâ ɲû* 'radio', *khūaŋ khɔ̌ɔm phĭw tǝ̂ǝ* 'computers'
flat (two dimensional)	*pĭi (repeater), ʔăn*	*pĭi* 'ticket'
long (one dimensional)	*sèn, ʔăn* *dŭaŋ, ʔăn* *dâam, dŭaŋ, ʔăn* *kâan, ʔăn* *thæ̆ŋ, kâan, ʔăn* *dɔ̂ɔk, ʔăn*	*săay ʔæ̆æw* 'belt' *khĕm* 'needle', *wĭi* 'comb', *sĭam* 'spade', *dàap* 'sword', *kĭaw* 'sickle' *mîit* 'knife' *pàak kăa* 'pen' *sɔ̌ɔ* 'pencil' *tā pūu* 'nail', *lûuk nàa* 'arrow'

The classifiers which can be replaced by the general classifier *ʔăn* are described below.

toŏ is noted for animals and has been extended to 'bad people, ghost, rainbow, dummy, character, letter, number, doll, arm-like and leg-like clothes'.

nūay is used for 'fruit' and has been widely extended to a large number of entities such as 'coffins, tables, chairs, guitars, radios, computers, stones mills, mortars'.

sèn classes flexible long objects such as 'belt'.

dŭaŋ originally designated the class for round radiating entities such as 'sun and moon'. It has been extended to long inflexible tools such as 'needle, comb, spade, sword, sickle'.

dǎam classes long and small inflexible objects with a long handle such as 'knife'.

kâan is restricted to long and small items usually pointed at one end such as 'spoon, fork, pen and pencil'. The long inflexible classifier *thǣŋ* for 'pencil' can replace *kâan.*

dɔ̂ɔk has been extended from 'flower' to like-shaped entities such as 'nail and arrow'.

In addition to the general classifier *ʔǎn*, Lao has a very widely-used classifier *nūay* which originally categorized 'fruit'. This classifier has become a powerful class as it encompasses a large domain of objects. 'Balls, mountains, containers, furniture are all examples of *nūay* class as listed in Tables 18 and 19.

Table 18. Classification of entities with the classifier *nūay*

Semantic fields	Entities classed by nūay
fruit	*màak phîk; màak phĕt* 'chili pepper', *màak mây* 'fruit', *màak kîaŋ* 'orange', *màak hūŋ* 'papaya', *màak lǽæ sǽæŋ;màak kōoy* 'grape', *màak kûay* 'banana'
round (three dimensional)	*khāy mûk* 'pearl', *màak bǎan* 'ball', *khāy* 'egg', *mōoŋ* 'clock, watch'
like-shaped (spherical)	*tǎw fãy* 'stove'
bulky	*phūu* 'mountain'
containers	*kǽæw* 'bottle', *cɔ̀ɔk kǽæw* 'glasses', *cɔ̀ɔk kǎa fẽe* 'cup', *hǎy* 'jar', *mɔ̀ɔ* 'pot' (cooking), *khû* 'bucket', *mɔ̀ɔ tôm nâam* 'kettle', *tûm; kŏŋ* 'cage'
furniture	*tûu* 'closet, cupboard'
body part	*tǎa* 'eye'

Newly introduced items are classed by either *nūay* or *ʔǎn* so the widely-applicable classifier *nūay* has a strong tendency to be a generalized class. Besides *ʔǎn,* the classifier *nūay* can be used interchangeably with shape-based classifiers as listed in Table 19.

Table 19. Classification of entities with the classifier *nūay* and specific classifiers

Semantic fields	classifiers	entities
bulky	*nūay, kɔ́ɔn* *nūay, ʔǎn* *nūay, kīː* (repeater)	*khìi fɔ̀ə; mêek* 'cloud' *môo* 'stone mill', *khôk* 'mortar' *kīː* 'loom'
container	*bǎy, nūay* *nūay, kǎp* (repeater*)* *nūay, ʔǎn, lõoŋ* (repeater)	*sãam* 'basin' *kǎp* 'box' *lõoŋ* 'coffin'
furniture	*nūay, ʔǎn* *nūay, tǐaŋ* (repeater)	*tò* 'table', *tāŋ* 'chairs' *tǐaŋ* 'bed'
newly introduced	*nūay, ʔǎn*	*kǐi tâa* 'guitars', *wî thâ ɲû* 'radio', *khūaŋ khɔ̃ɔm phīw tə̀ə* 'computers'
body part	*nūay, tâw*	*nõm* 'breast'

The shape-based classifiers that can be replaced by *nūay* are as follows:

kɔ́ɔn classifies lump-like entities such as 'pill, fish ball, rock, stone, and cloud'.

bǎy typically classes 'leaf' and has been extended to sheet-like things. It has developed to class containers resulting in an overlap of the flat class *bǎy* and the round class *nūay*. So most containers can be classed both by *bǎy* and *nūay*.

tâw is used with 'breast'.

Another 'round' classifier *dǔaŋ* has a wide distribution but encompasses a smaller domain of objects than *nūay*. As mentioned above, *dǔaŋ* is a 'round and radiating' classifier which has undergone reinterpretation to apply to 'long' objects such as bladed tools and long musical instruments as shown in Table 20.

Table 20. Classification of entities with the classifier *dǔaŋ* and specific classifiers

Semantic fields	classifiers	entities
round (three dimensional)	*dǔaŋ*	*tǎa wēn* 'sun', *dǔan* 'moon'
long (one dimensional)	*dǔaŋ* *dǔaŋ, ʔǎn* *dâam, dǔaŋ, ʔǎn*	*hɔ̀ɔk* 'spear', *thǎy* 'plough', *khǽæn* 'reed organ' *khěm* 'needle', *wǐi* 'comb', *sǐam* 'spade', *dàap* 'sword', *kīaw* 'sickle' *mîit* 'knife'

Though *dŭaŋ* is widely used, its semantic extension is more restricted than *nŭay*. Subsequently, *dŭaŋ* may remain a shape-based classifier while the competing classifier *nŭay* continues to class newly introduced items and becomes another general classifier being used along with the genuine classifier *ʔăn*.

5.8 Central Thai

Central Thai has a genuine general classifier *ʔan* which is usually used for small entities. Out of 242 nouns in the wordlist used for data collection, nine entities are classified with *ʔan*. There are four entities which are classed by either *ʔan* or specific classifiers as exemplified in Table 21. These thirteen entities belong to only one class, i.e., 'long (one dimensional)' class.

Table 21. Classification of entities with the classifier *ʔan* and specific classifiers

Classifier *ʔan*	Entities
ʔan	*prææŋ* 'brush', *prææŋsĭifan* 'toothbrush', *thĭitàtlép* 'nail clipper', *wĭi* 'comb', *khrâat* 'harrow, rake', *sàak* 'pestle', *máay (lék)* '(small) stick', *wǽæntaa* 'spectacles', *năam* 'thorn'
lêm, pàak, ʔan	*sìw* 'chisel'
lêm, ʔan	*máaybanthát* 'ruler', *kankray* 'scissors'
tâw, ʔan	*khɔ́ɔn* 'hammer'

In addition to the entities displayed in Table 21, there are a large number of entities which are used with the general classifier *ʔan*. The Royal Institute (2003) lists 54 entities that are classed only with *ʔan* and 58 entities that can be classed either with *ʔan*, repeaters, or other specific classifiers.

Central Thai also has a 'round' classifier, i.e., *lûuk* which originally classes fruit. This classifier has the nominal meaning 'offspring, child'. It is usually combined with another word to form a compound and has the meaning 'minor, subordinate, object of an action, or the complement of a thing', e.g., *lûukcâaŋ* 'employee' and *lûukkuncɛ̂ɛ* 'key'. The classifier *lûuk* has been extended to class like-shaped objects and containers. When it classes containers, it usually overlaps with the flat classifier *bay* which has the nominal meaning 'leaf'. Therefore most containers can be classified both by *lûuk* and *bay*. In addition to *lûuk* and *bay* some containers are also classed by repeaters such as 'closet, cupboard, cage, and coffin'. Eggs are also classed by *fɔɔŋ*. Some natural phenomena are also put into the 'round' class such as *khlûuun* 'wave', *tâyfùn* 'typhoon' and *mɔɔrasŭm* 'monsoon'. Table 22 consists of entities which are classified with *lûuk* and other specific classifiers.

Table 22. Classification of entities with the classifier *lûuk* and specific classifiers

Semantic fields	classifiers	entities
fruit	*lûuk* *bay, lûuk*	*phǒnlamáay* 'fruit', *sôm* 'orange', *màlaùkɔ* 'papaya', *ʔaŋùn* 'grape' *klûayhɔ̆ɔm* 'banana'
round (three dimensional)	*lûuk* *bay, f̌ɔŋ, lûuk*	*lûukchǐnplaa* 'fish ball', *bɔɔn* 'ball' *khày* 'egg'
like-shaped (spherical)	*bay, lûuk*	*taw* 'stove', *mùak* 'hat'
bulky	*lûuk* *bay, lûuk*	*phuukhǎw* 'mountain *khrók* 'mortar'
container	*bay, lûuk* *bay, tûu, lûuk* *bay, lûuk, kroŋ* *bay, lûuk, looŋ*	*khùat* 'bottle', *thûay* 'cup', *chaam* 'bowl', *ʔòoŋ* 'jar', *mɔ̂ɔ* 'pot', *ʔàaŋ* 'basin', *thǎŋ* 'bucket', *thǔŋ* 'bag', *kaatômnáam* 'kettle' *tûu* 'closet, cupboard' *kroŋ* 'cage' *looŋ* 'coffin'
flat (two dimensional)	*bay, lûuk*	*kràdôŋ* 'winnowing fan', *caan* 'plate'

Though the classifier *lûuk* has a wide usage, it still centers around 'round (three dimensional)' domain whereas the classifier *tua* 'body' has crossed the animal domain to encompass various semantic domains. The classifier *tua* has undergone a metaphorical extension to include arm-like and leg-like entities such as sewn clothing, furniture, dummy, and characters. At a later stage, it is used with newly introduced items as presented in Table 23. The classifier *tua* may be used interchangeably with other specific classifiers. The use of *tua* for newly introduced objects such as 'tape recorder, computer, radio, university course' is governed by a register choice. It is used only in colloquial speech and is not included in the list of Thai classifiers by the Royal Institute. This classifier has been very powerful and productive. Besides the entities listed in Table 23, it also classes new merchandises, medicine and cosmetics. Therefore there is a high tendency that *tua* will become another general classifier.[2]

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[2]See Sujaritlak (1997) for detailed discussion of *tua*.

Table 23. Classification of entities with the classifier *tua* and specific classifiers

Semantic fields	classifiers	entities
non-human being	*tua* *tua,ton*	*sàt* 'animal' *phĭi* 'ghost'
like-shaped (spherical)	*tua*	*tŭkkataa* 'doll', *tua ʔàksɔ̌ɔn* 'character, letter', *tualêek* 'number'
flat (clothes)	*tua*	*kaaŋkeeŋkhǎayaaw* 'trousers', *kaaŋkeeŋkhǎasân* 'shorts', *sɯ̂a* 'shirt', *kràprooŋ* 'skirt'
long	*tua* *tua,dɔ̀ɔk*	*kòpsǎymáay* 'plane', *rúŋkinnáam* 'rainbow' *tàpuu* 'nail'
furniture	*tua*	*to'* 'table', *kâwʔîi* 'chair'
newly introduced	*tua* *tua, khrɯ̂aŋ* *tua, klɔ̌ŋ* *tua, wíchaa*	*kiitâa* 'guitar', *maykhrofoon* 'microphones', *hûn* 'stock' *khrɯ̂aŋbanthɯ́ksĭaŋ* 'tape recorder', *khɔɔmphíwtə̂ə* 'computer' *wítthayú* 'radio' *wíchaa* 'university course, subject'

Central Thai also has another round classifier, i.e., *duaŋ* which is lexically 'circle, disk, spot, dot'. It has not been developed into a general classifier. It is limited to round and radiating entities such as *phráʔaathít* 'sun', *phrácan* 'moon' *daaw* 'star', *takiaŋ* 'lamp' and some other entities such as *traa* 'seal' and *satææm* 'stamp', *taa* 'eye', *duaŋhoŏrasàat* 'horoscope'. It should be noted that in Sukhothai inscriptions, this classifier has a much wider use than at present, thus more like in Lao (also White Tai in Vietnam); e.g. Inscription of Wat Khema (no.14). So Central Thai has narrowed the earlier Southwestern Tai class for *duaŋ*.

6. A descriptive comparison

All general classifiers discussed in section 5 are compared in terms of the semantic fields of the entities they are used with. Table 24 displays the number of entities that are used with each general classifier in each semantic field. The number includes both the entities that are classed with a general classifier and those that are classed either with a general classifier or other specific classifiers.

Table 24. Number of entities used with general classifiers in various semantic fields

Semantic fields	Thai		Lao		Shan		Dai		NZ	Hlai	Sui	Bouyei	
	tua	*ʔan*	*mūay*	*ʔǎn*	*hoj²*	*ʔan¹*	*nɔi⁵*	*ʔan*	*ʔan²⁴*	*hom⁵³*	*lam¹*	*ʔdan³³*	*kai²⁴*
fruit			6		5		5		5	6	4	3	
round			4		4		9		10	13	8	6	
like-shaped	3		1	2	1	1	2		7	5	10	6	1
lump								1	1	2		1	
bulky			4	1	3	2	3		3	4	4	2	
container			11	2	1	2	12		13	12	10	11	
furniture	2		4	1		1	3		4	2	6	4	
newly introduced	7		3	6	4	2		4	7	9	8		3
literary							2				1		
flat	4			2		2	2		8	7	5	2	1
long	3	13		27		14		13	8	8	10	2	1
non-dimensional						1	1		2	2	2	1	1
localities							1		7	6	4	4	
body part			2		1	2			9	8	12		2
vehicle									5		6		
plant							1		1	3	3		
non-human being	2												

The comparison of general classifiers in eight Tai-Kadai languages reveals that there are three kinds of general classifiers, that is, genuine general classifier, 'round' general classifier, and 'animal' general classifier.

1.   Genuine general classifiers are classifiers which do not denote salient characteristics of the associated nouns. They are displayed in Table 25.

Table 25.   Genuine general classifiers

Bouyei	Hlai	Northern Zhuang, Dai, Shan, Lao, and Central Thai.
kai^{24}	hom^{53}	$ʔan$

The general classifier kai^2 classes small inanimate objects such as 'ring, reed of the loom' and other inanimate objects which are not native such as 'doll, microphone, university course, country'. As for body parts, the informant said Bouyei people did not count body parts but if they had to do it, they would use kai^2 as the general classifier.

The general classifier hom^{53} is defined as "classifier for measurement most extensively used especially before nouns which do not have special measure words of their own" (Somsonge et al 2003:117). It can be used widely with entities within all semantic fields except literary and non-human being. It is also used interchangeably with other shape/form classifiers and also ka^{11} which class 'coffin' and 'pod'.

The general classifier $ʔan$ is prevalent in the areas outside China, namely, Burma, Laos, and Thailand. However this classifier is still preserved in Dai and Northern Zhuang languages which are spoken in the Southern China. The general classifier $ʔan$ is used to class small entities in Dai and Central Thai languages. It is also extended to class newly introduced items in Dai. On the other hand this classifier classes entities of any size in the Northern Zhuang, Shan, and Lao languages. Since the classification of entities with $ʔan$ is not dependent on salient and inherent characteristics of the referent, Wilaiwan (1976) affirms that $ʔan$ should be called *khamchûaynáp* 'counting word' instead of *khamláksànànaam* 'classifier'. She hypothesizes that the original function of $ʔan$ is a noun substitute as attested by the clause *mii phĭhăanʔanyày* 'There is a temple which is big' in the Ramkhamhaeng inscription. The word $ʔan$ in this clause functions as a noun substitute and has been replaced by *thîi* and *sûŋ* 'which, that' at the present time.

2.   'Round' general classifiers originally class 'fruit' or 'round' objects. The 'round' general classifier lam^1 in Sui has the nominal meaning 'fruit'. The 'round' classifiers are shown in Table 26.

Table 26.   Round general classifiers

Bouyei	Sui	Dai	Shan	Lao
$ʔdan^{33}$	lam^1	noi^2	$hoʔ^2$	$nŭay$

The 'round' classifier *?dan^{33}* classes saliently three-dimensional objects and also some flat and long objects. It is extended to class 'container, furniture, localities, and non-dimensional objects'. The Sui 'round' classifier *lam^{1}* is extensively used to class objects within a wide range of semantic fields.

The 'round' classifiers *noi^{5}*, *hoj^{2}*, and *mūay* originally class 'fruit' and spherical objects. They have expanded beyond the 'round' objects to encompass 'container, furniture, and newly introduced items'. Dai extends the use of *noi^{5}* to 'book, notebook, winnowing pan, plate, ring, island, and pod' which are within different semantic domains.

3.   'Animal' general classifier

Central Thai is the only language that has been in the process of generalizing the 'animal' classifier *tua*. This classifier has been very productive. It has been significantly extended outside its original realm as seen in Table 23.

7.   Conclusion and discussion

This study has found that there are three kinds of general classifiers in the Tai-Kadai languages, namely, Bouyei, Sui, Hlai, Northern Zhuang, Dai, Shan, Lao and Central Thai. The first kind is genuine general classifiers which do not class the physical characteristics of objects. They include *kai^{24}* in Bouyei language; *hom^{53}* in Hlai language; and *?an* in Northern Zhuang, Dai, Shan, Lao, and Central Thai languages. The second kind of general classifier is derived from shape/form classifiers which originally classed 'fruit' or sphericals. The third kind of general classifier has been extended from 'animal' domain to categorize various semantic fields, especially newly introduced items.

The genuine general classifiers *kai^{24}* and *hom^{53}* are restricted to Bouyei and Hlai respectively whereas *?an* is used in all branches of the Tai group. Saul (1965) has also found the general classifier *?an^{1}* in Nung which is in the Central Tai group. The presence of *?an* in the three groups of Tai is diagrammed below.

?an

Southwestern Tai	**Central Tai**	**Northern Tai**
Dai	Nung	Northern Zhuang
Shan		
Lao		
Central Thai		
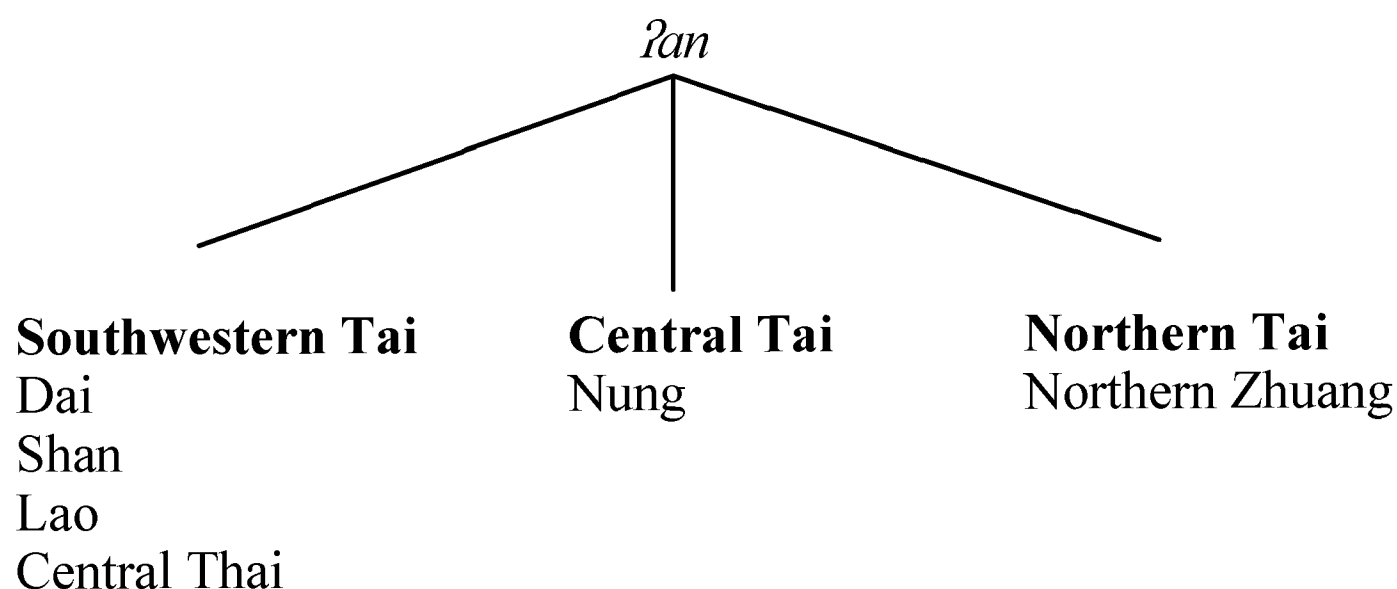
Even though Nung and Northern Zhuang are subject to Chinese influence and the word order of numeral noun phrases is the same as in Chinese, that is, numeral-classifier-noun, they still preserve *ʔan*. On the other hand Bouyei which is geographically isolated from the other sample languages is heavily influenced by Chinese and does not have *ʔan*.

The classifier *ʔan* is used most extensively in the Northern Zhuang language. It is a widely applicable classifier which classes all sorts of items ranging from small items to large objects such as vehicles, localities, newly introduced items, etc. Bualuang (1984) has found that in the Sukhothai period, Ayutthaya period and the present time, *ʔan* was used most in the Sukhothai period. It was used to class humans, animals, and inanimate objects of all sizes. The work of Wallaya (1970) also agrees with Bualuang. The general classifier *ʔan* was used to class animals such as *sùnákcîŋcɔ̀ɔk* 'wolf'; large non-discreet objects such as *khǎw* 'mountain', *fáa* 'sky', *mæ̂ænáam* 'river'; and abstract nouns such as *konʔùbaay* 'trick'. It can be concluded that the use of *ʔan* in the Northern Zhuang language is the most conservative.

The round general classifier, originally the class for fruit, now has been extended to non-organic globular items and other objects of any shapes and sizes. Conklin (1981:122) has also discovered that the general classifier *dan^6* has become the most general class in Dioi or Bouyei. She states that "From the notion 'round/globular' it has expanded its semantic domain to cover newly acculturated objects (e.g. firearm) as well as serving to form abstract nouns. Such a powerful class may continue to attract objects whose affinity is ambiguous or in doubt."

The innovative classification of entities with the round general classifier is geographically varied. The Dai (Tai Lue) language, spoken in China, has extended the round classifier *noi^5* from fruit and like-shaped objects to container, furniture, book, notebook, and island. Hanna (1991) reports that the Tai Lue spoken in Chiang Kham district, Phayao province, Thailand, has the classifier *kɛn^2* for fruit and container. This classifier is used interchangeably with *doong^1* for heavenly bodies. The Northern Thai dialect spoken in Lampang also uses *kèn* in the same way as Tai Lue. Therefore, language contact may be a factor in this similarity. It should be noted that the use of this round classifier in both locations is similar to the use of *lûuk* in Central Thai. Other languages, namely, Northern Zhuang, Bouyei, Sui, and Southern Thai also have the cognates *ŋvei^{21}*, *nɯm^6*, *ɲui^6*, *nuay^{45}* respectively but these classifiers have not been generalized as *noi^5*, *hoj^2*, and *nūay* in the Dai, Shan, and Lao languages respectively.

Finally, the use of classifiers is also governed by sociolinguistic factors.[3] The classifier *tua* 'body' in Central Thai is used widely with newly

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[3]Barz and Diller (1985:155) suggest that "for a more detailed understanding of classifier evolution and spread, sociolinguistic and stylistic issues need to be considered." See also further discussion of sociolinguistic and stylistic issues in Preecha (1989).

introduced items. Young people tend to substitute specific classifiers with the classifier *tua*, therefore it can be predicted that this classifier will become another general classifier. However, the use of this classifier is governed by a register choice, that is, it is used only in colloquial speech.

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