PLANT-BASED CLASSIFIERS IN TAI DAM

Somsonge Burusphat

Research Institute for Languages and Cultures of Asia Mahidol University, Thailand <sburusphat@gmail.com>

1. Introduction

The primary dichotomy of Tai classifier system is animate versus inanimate (Morev 2000). Animate classifiers are divided into human and non-human. The classification of inanimate nouns is mostly based on a perceptual basis, i.e., their observed characteristics like shape, size, and consistency. Inanimates are grouped according to their similar shapes. Conklin (1981:136) points out that the geometric shapes are derived from plants, in their component parts as detailed below:

Looking at the classes lexicographically, the abstract, geometric shapes which are the organizing principles of the categories can be seen as themselves drawn from the natural world. Not circles, spheres, lines, cubes, and golden rectangles have inspired these categories, but rather the categories are geometric generalizations derived from naturally occurring forms. They refer to plants, in their component parts. These shapes are generalized to encompass much of the material, and sometimes spiritual world.

Allan (1977) also notes that inanimacy covers a large number of classifiers. The commonest inanimate classifier is one for trees and wooden objects and the 'tree' classifier is frequently related to the class of long or saliently one-dimensional objects.

A large number of inanimate classifiers in Tai Dam or Black Tai, a language of Southwestern Tai (Li 1960), tend to draw heavily on plant parts. This paper, therefore, focuses on a semantic analysis of the plant-based classifiers in Tai Dam

Tai Dam refers to people dressed in black costumes. Tai Dam people migrated from Muang Thaeng (presently Dien Bein Phu in northwestern Vietnam) in the northern part of Laos which used to be under the Luang Prabang government (Sribusara 1987). The original settlement of Tai Dam people in Thailand was in Phetchaburi province. Later on, Tai Dam people moved to other provinces such as Kanchanaburi, Ratchaburi, Suphanburi, Nakhon Pathom, Samut Sakhon, and Samut Songkhram. In Thailand, Tai Dam people are addressed by various names such as Lao Song, Song, Lao Song Dam, Thai Song, Thai Song Dam.

Most previous studies of the Tai Dam language were devoted to a phonological description or comparison. A number of lexical studies have also been found. They gear towards a lexical comparison of Tai Dam dialects (Praphin 1996) and a lexical variation and change by age groups (Buranasing 1988, Liamprawat and Wattanaprasert. 1996, Saeng-ngam 2006). Few works have been found on Tai Dam classifiers. Yensamut (1981) studies words and meanings in Lao Song spoken in Samutsakhon province. Two aspects of Lao Song classifiers are under this study, that

is, classifiers in numeral noun phrases and classifier types. The author categorizes Lao Song classifiers into three groups, human classifiers, animal and plant classifiers, and inanimate classifiers. She lists sixteen classifiers and describe what nouns these classifiers classifier. Jirananthanaporn et al (2003) studies the grammatical system in Thai Song spoken in Phitsanulok province. The study of Thai Song classifiers in this work covers the syntactic structure of Thai Song classifiers and classifier types which include material classifiers and shape-based classifiers. The material classifiers are categorized into human and non-human. Non-human classifiers are used with animals, plants, and objects. The shape-form classifiers classify the accompanying nouns according to the shape of their referents, that is, round, long, and flat. This study also describes the word classes that Thai Song classifiers are derived from such as verbs, nouns, and pronouns. Finally the authors list sixty-three classifiers and the nouns that are used with these classifiers.

This research departs from the previous studies of Tai Dam classifiers in that it analyzes the semantic components of Tai Dam classifiers that are derived from plant parts and a metaphorical extension of these classifiers. Moreover, the research sites are also different. This study collects data from three provinces in Vietnam, Yen Bai, Dien Bien Phu, and Son La. As Tai Dam speakers in Vietnam and in Thailand have been in contact with Lao and Thai speakers respectively, some plant-based classifiers of Tai Dam will also be compared with Lao and Thai.

2. Methodology and framework

The classification of the entities into different semantic domains is based on Adams and Conklin (1973) and Denny (1976). The continuum model posited by Conklin (1981) is adapted to illustrate a metaphorical extension of plant-based classifiers.

A list of 356 nouns was prepared for data collection. These nouns can be classified by a number of classifiers. This list was used for interviewing two main informants. The data were checked with six additional informants. The eight informants are listed with their ages, genders, and locations as follows:

Gender	Age	Location	
male (main informant)	75	Komi village, Sathaengjan, Dien Bien Phu	
male (main informant)	47	Thaengluang village, Sachiangtung, Son La	
female	73	Komi village, Sathaengjan, Dien Bien Phu	
male	81	Kangna village, Nghia Lo, Yen Bai	
female	87	Thaengsuan village, Sammuen, Dien Bien Phu	
female	47	Boong village, Saboonglaw, Dien Bien Phu	
male	85	Piang village, Sanampa, It Ong (Muong La), Son La	
female	62	Kangna village, Nghia Lo, Yen Bai	

3. The semantic analysis of the plant-based classifiers in Tai Dam

Whole plant

Whole plant classifiers				
Lexically plant-based	Lexically plant-based Semantic components			
ko¹ 'plant/tree'	whole plant, uprights, tall	ko¹ma³paw6 'coconut		
		tree'		
ton ⁵ 'plant'	whole plant, small, fast growing	ton ⁵ fak ³ kaat ³ 'cabbage		
		plant'		
cwo² 'slender stem of	whole plant, climbing	cwə²ma³nəj² 'luffa/gourd		
a climbing plant'		plant'		
sum¹ 'clump'	whole plant, cluster	sum ¹ maj ⁶ faj ³ 'a clump of		
		bamboo'		

Plant parts

3.1 Stick/stalk

Stick/stalk-based classifiers			
Lexically plant-based	Plant parts		
	One dimension (long),		
	inflexible		
ko¹ 'stalk'	uprights (posts, pillars)	maj ⁶ ko ¹ 'post, pillar'	
ton ⁴ 'a piece of wood'	piece/fragment	tən ⁴ maj ⁶ 'block'	
lam ² 'truck of a tree'	round, large, rodlike	lam²?əj⁵ 'trunk of	
		sugarcanes'	
lon ⁵ ~ don ⁵ 'stick of wood'	round, small, rodlike	lon⁵luə¹ ~ don⁵luə¹	
		'firewood'	
ŋa ⁴ 'branch of tree'	branch	ŋa⁴maj ⁶ 'branch'	
kaan ⁵ 'midrib, the stem of a	slender, pointed	kaan ⁵ kuaj ⁵ 'midrib of a	
leaf, a flower, or a fruit'	-	banana leaf'	
ban ³ 'segment of jointed	segment, hollow, open	baŋ³maj ⁶ faj³ 'jointed	
stem'	ends	stem of bamboo, one end	
		or both ends open'	
plon ⁵ 'segment of the many-	segment, blocked at both	plon ⁵ maj ⁶ faj ³ 'jointed	
jointed stem of a bamboo or	ends	stem of bamboo, both	
a sugarcane'		ends blocked'	
	Two dimension (flat)		
pεn³ 'board'	inflexible, flat, large	fa? ⁴ maj ⁶ faj ³ 'flooring	
		made of split bamboos'	

kim⁵ 'small pieces'

Other non-plant based classifiers (one dimensional and inflexible)				
No lexical/nominal reference	No lexical/nominal reference Semantic components			
ma? ⁴	straight, bladed implements	ma?4kiəw² 'sickle'		
lem ⁵	thin	maj ⁶ thu ³ 'chopstick' khew ⁵ 'tooth' lem ⁵ phom ¹ 'hair' cua? 'rope'		
laam ⁵	handle	sa? ⁴ /laam ⁵ tam ¹ cew ³ 'pestle' laam ⁵ faj ² 'matches'		

3.2 Seed

Seed-based classifiers			
Lexically plant-based Semantic components Plant parts			
	Three dimension		
mit ⁴ 'seed'	round, small, granular	mit ⁴ khaaw ⁵ 'grain'	
ken³ 'kernel of fruit'	round, small, kernel	ken³ma³khaam¹ 'seeds of	
		tamarind'	

3.3 Fruit

Fruit-based classifiers				
Lexically plant-based Semantic components Plant parts				
nuəj³ 'fruit'	round, globular, spherical	ma³tɛŋ¹ nam ⁶		
		'watermelon'		
fak³ 'pod'	long, pod	thuə³saaj¹swə⁵ 'long		
		bean'		

3.4 Leaf

Leaf-based classifiers			
Lexically plant-based Semantic components Plant parts			
bam¹ 'leaf'	flexible, flat, sheet-like	bauu¹ ma³huŋ³ 'papaya	
		leaf'	

3.5 Flower/sprout

Flower/sprout-based classifiers				
Lexically plant-based Semantic components Plant parts				
bo?3 'flower'	flower-shaped, blossom	bo?³ma³?w³ 'pumpkin		
		flower'		
thuəŋ³ 'sprout of mushroom'	sprout, mushroom	thuəŋ³het³ 'mushroom'		
duəŋ¹~ luəŋ¹ 'shoot'	shoot	duəŋ¹nɔ³/¹nɔ³ maj ⁶		
		'bamboo shoot'		
		duəŋ¹ nɔ³ kuəŋ⁵ 'banana		
		shoot'		
		no ³ k ^h aa ³ 'galingale shoot'		

3.6 Tuber/root

Tuber/root-based classifiers				
Lexically plant-based Semantic components Plant parts				
ban ⁵ 'tuber'	round, root, bulb	fwə?³ 'taro'		
hua¹ 'head/front'	round, head-like	həm¹buə³ 'onion'		

4. Metaphorical extension

The plant-based classifiers are lexemes. They are derived from nouns which can be used as their own classifiers called "repeaters". Some of these repeaters remain nominal and some have undergone a metaphorical extension from the original plant parts to other non-organic entities of similar shapes and finally have been grammaticalized into classifiers. Some repeaters have a small degree of extension and some have a wide range of extension as exemplified below:

Lexically plant-based	Semantic components	Non-plant entities
sum¹ 'clump'	whole plant, cluster	sum¹puə?³ 'anthill, termite hill'
lon ⁵ ~ don ⁵ 'stick of	round, small, rodlike	maj ⁶ thu1khew5 'toothbrush' (also
wood'		?an)
		maj ⁶ taw ⁶ 'walking stick'
kεn ³ 'kernel of fruit'	round, small, kernel	ken³taa¹ 'pupils'
		ken³ham¹ 'testicles'
nuəj³ 'fruit'	round, globular,	saj³ 'egg'
	spherical	ma³pat³ 'beads'
		ma³ket⁴ 'botton'
		haj¹nun⁴kʰaaw⁵ 'small earth jar
		for steaming rice'
fak³ 'pod'	long, pod	fak³phʰaa6 'knife sheath'
kaan ⁵ 'midrib, the	slender, pointed	kaan ⁵ buəŋ³ 'small spoon'
stem of a leaf, a		kaan ⁵ coŋ ⁵ 'large spoon'
flower, or a fruit'		kaan ⁵ hwəŋ¹ 'joss stick'
		ka:n ⁵ /ma? ⁴ but ⁴ mxk ³ 'pen'
		(also ma? ⁴)
		ka:n ⁵ /ma? ⁴ but ⁴ ci ² 'pencil'
		(also ma? ⁴)
		ka:n ⁵ vi ¹ / ka:n ⁵ bi ¹ 'pencil'
		bet ³ /vet ³ 'fishing rod'
		?o¹hom⁴ 'umbrella'
		kaan ⁵ nu ² 'broom stick'
ban ³ 'segment of	segment, hollow, open	baŋ³fum² 'reed of a loom'
jointed stem'	ends	(also k han5)
		hwə² 'boat'
		se¹kwaaj²la?⁴ 'buffalo cart'
		se¹dap⁴ 'bicycle'
		se ¹ maj ⁴ 'motorcycle'
		ban ³ ?o¹to¹ 'car'
		baŋ³sɛ¹bin¹ 'air plane'
	l	J I

Lexically plant-based	Semantic components	Non-plant entities
bam¹ 'leave'	flexible, flat, sheet-like	cia¹ 'paper'
		$b\varepsilon^3 c^{h}\varepsilon^2$ 'ticket' (also $b\varepsilon^3$)
		baw ¹ ŋən ¹ 'bank note'
		bauu¹doŋ⁵ 'winnowing basket'
		(also k hans)
		kup³ 'hat'
		lε ³ k haaw ⁵ 'plate' (also lε ³)
		thuj ⁵ 'bowl'
duəŋ¹~ luəŋ¹ 'shoot'	shoot	duəŋ¹mɔ⁵ 'pot'
		mɔ⁵k ʰuə⁴ 'pan'
		daw¹ 'star'
		ta³wen² 'sun'
		bwən¹ 'moon'

5. Discussion

5.1 The classification of entities with plant-part names in Tai Dam is geographically varied. Tai Dam in Nakhornpathom province, Thailand has extended the use of **nuaj**³ which originally classes fruit and spherical objects in the same way as Lao. This round classifier has expanded beyond the round objects to encompass containers, woven baskets, utensils and bulky objects such as mountain as well as non-spherical objects such as furniture and appliances. On the other hand, Tai Dam in Vietnam limits the use of this classifier to fruits and some spherical objects such as eggs, beads, buttons, bullets, and small jars. In Central Thai, the word **nùay** is rarely used as a classifier but used in the sense of 'unit' such as **nùajrâatchakaan** 'government office' (Weera Ostapirat p.c. 2013). A comparison of the extended usage of this classifier in Tai Dam and Lao is illustrated in the following continuum model.

	fruits	spherical objects	containers
Tai Dam			
(Vietnam)			

	fruits	spherical objects	bulky objects	non-spherical
Tai Dam				_
(Thailand) Lao				

5.2 Objects may be used with different classifiers depending on how they are perceived. A pencil but^4ci^2 is used with three classifiers, lon^5 (stick), $ma?^4$ (bladed implement), $kaan^5$ (slender, pointed), by three different informants. Another example is the noun kup^3 'Vietnamese hat' which is perceived as flat (two dimensional) so the classifier $bauu^1$ 'leaf' is used with this object whereas $mu?^3$ 'hat' is used with the general classifier k^han^5 .

It should be noted that Tai Dam in Vietnam has two general classifiers $\mathbf{2an^1}$ and $\mathbf{k^han^5}$. The latter is more productive than the former. It can be used with a variety of objects such as implements, utensils, containers woven baskets, appliances, and

newly-introduced items such as radio, television, computer, camera, electric fan, and refrigerator. As noted by a 75 year old informant " $\mathbf{k}^h \mathbf{a} \mathbf{\eta}^5 \mathbf{m} \mathbf{a} \mathbf{n}^1 \mathbf{w} \mathbf{a} \mathbf{a}^4 \mathbf{\eta} \mathbf{a} \mathbf{a} \mathbf{j}^1$ " 'It's easy to use $\mathbf{k}^h \mathbf{a} \mathbf{\eta}^5$ ".

- **5.3** Some plant-based classifiers have not undergone a metaphorical extension to class non-organic objects. For example, the classifier **mit**⁴ 'seed' is used only with grains in Tai Dam (Vietnam) whereas Tai Dam (Thailand) also uses this classifier to class **jaa**²**mit**⁴ 'tablet (medicine)'. Tai Dam (Vietnam) uses the classifier **ton**¹ 'small pieces' with 'tablet' instead.
- **5.4** Tai Dam, both in Vietnam and Thailand, have their own development of classifier system resulting in some innovative classifiers such as **ban**⁵ 'tuber' and **thuəŋ**³ 'sprout'. Tai Dam (Thailand) uses the classifier **thuəŋ**³ with both bamboo shoots and mushrooms whereas Tai Dam (Vietnam) uses this classifier only with mushrooms and use the classifier **duəŋ**¹ with shoots. The classifier **duəŋ**¹ has been extended to class pots, pans, and heavenly bodies.

In Lao (Vientiane dialect) and Central Thai, shoots are classed with **nòo** and mushrooms are put in the same class as flowers, thus they are classed with **dòok**. The Lao classifier **dǔaŋ** has been shifted from the original 'round and radiating' domain to the round and bladed tools such as sickles and finally to the 'long' domain, that is, long bladed tools (e.g., spears, swords) and long musical instrument (reed organ).

The Central Thai cognate **duan** remains within the 'round' class. In addition to round and illuminated entities, it also classes a variety of objects perceived as round such as heart, eyes, stamps, seals, soul, spirit, and abstract nouns. A comparison of the extended usage of this classifier in Tai Dam, Lao, and Central Thai is illustrated in the following continuum model.

	shoots heavenly bodies		containers	
Tai Dam			•	
	round and illuminated (the sun, moon, stars)	round and bladed tools (sickle)	long bladed tools (spear, sword)	Long musical instrument: reed organ
Lao	<u> </u>		<u> </u>	•
	round and illuminated (the sun, moon, stars)	round (heart, eyes)	perceived as round (stamp, seals, soul)	Abstract nouns
Thai				—

While bladed tools are classified with **duən**¹ in Lao, they are classed with **ma?**⁴ in Tai Dam. The classifier **ma?**⁴ is shared by other Tai languages as well such as Shan, Bouyei, and Southern Zhuang. It is speculated that this classifier might be derived from a noun meaning 'a mark made by bladed tools'. The bladed semantic

component has been transferred from the noun to a new classifier. As a result, this noun has been grammaticalized as a classifier for bladed implements. This classifier corresponds to the Thai verb ba:k² 'to make a mark, to bevel' which has not been grammaticalized as a classifier. In Thai, bladed implements are classed by **lem³**.

5.5 An overlapping of different semantic domains may be found in one language but absent in another. For example the Tai Dam plant-based classifier **bau**¹ 'two dimension (flat), flexible' has been extended to the 'two dimension (flat), inflexible' and three dimension (round), inflexible semantic domains as seen in the following continuum model. This classifier does not overlap with other classifiers in other semantic domains as in Lao and Central Thai.

leav	,	flexible er, tickets bank s)	flat, inflexib (winnowing basket, Vietnamese plate)	(bowls)	cible
Tai Dam —			piace)		

On the other hand, this classifier overlaps with **phææn** 'flat, inflexible' and **nūaj** 'round, inflexible' in Lao and **phææn** 'flat inflexible' and **lûuk** 'round (nominal meaning 'offspring')' in Thai. A photograph may be classed with both **bay** and **phææn** in Lao and Thai. A bowl may be classed with both **bay** and **nūay** in Lao and with both **baj** and **lûuk** in Thai

5.6 Language contact plays an important role in the development of classifier system in Tai Dam. The classifier **lu?**⁴ 'classifier for round objects such as fruits' which is derived from the noun **lu?**⁴ 'offspring' is absent in Tai Dam in Vietnam but present in Tai Dam in Thailand because of the influence of the Thai language. Conklin (1981:152) remarks that **lûuk** is not found as a classifier in any other language except Siamese.

A number of Tai Dam plant-based classifiers were borrowed from Chinese.

For example:

Tai Dam Chinese ko¹ 'whole plant' kē kaan⁵ 'long, inflexible, slender' gēn pen³ 'flat, inflexible' pa'n

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Acknowledgements

This research is a part of the sub-project "Ethnic language processes in progress" of the cluster research "Ethnicity: New paradigm in language and cultural transmission" sponsored by the Research-Team Promotion Grant 2010-2013, Thailand Research Fund (TRF).

The author thanks Ajarn Sawai Petchroon, the Chair of Tai Dam Foundation (Thailand), and Mr. Iyared Boonyarit, my research assistant, for the arrangement of the trip to Tai Dam areas in Vietnam during May 15-22, 2013. My special thanks go to Associate Professor Weera Ostapirat for sharing his expertise on Comparative Tai with me. My sincere thank is extended to all of my excellent Tai Dam informants in Vietnam who patiently worked with me for many hours.