

## Bibliography

*In English :*

- Abercrombie, David. (1965) Elements of general phonetics.  
Edinburgh : Edinburgh University Press.
- Beijing. (1981) Nationalities in China. edited by the  
People's Publishing House. Foreign Language Press,  
Beijing.
- Bolinger, Dwight. (1968) Aspects of language.  
New York : Harcourt, Brace & World, Inc.
- Crisfield, Arthur G. (1978) Sound symbolism and the  
expressive word of Lao. Doctorate dissertation,  
University of Hawaii.
- Cruse, D.A. (1986) Lexical semantics. London :  
Cambridge University Press.
- Dhamabutra, Payom (1976) Recherches sur le symbolism  
phonetique en Thai : phonologie of signification.  
Doctorate dissertation for Sorbonne University,
- de Saussure, Ferdinand. (1959) Course in general  
linguistics. New York : Mcgraw-Hill.
- Diffloth, G. (1976) Expressives in Semai. Austroasiatic  
Studies I. Oceanic Linguistics Special Publication  
No. 13, 249-264.
- (1979) Expressives phonology and prosaic  
phonology in Mon-Khmer. In Luangthongkum, T. (et

- al), Studies in Tai and Mon-Khmer phonetic and phonology in honour of Eugenie J.A. Henderson.  
Bangkok : Chulalongkorn University Press.
- Firth, J.R. (1934) The use and distribution of certain English Sounds. Papers in Linguistics 1934-1951  
London : Oxford University.
- Fordyce, J.Forrest (1988) Studies in sound symbolism with special reference to English. Doctorate dissertation for University of California, Los Angeles.
- Gregerson, Kenneth. (1984) Pharynx symbolism and Rengao phonology. Lingua 62. North Holland : Elsevier Science Publisher B.V., Pg 209-238.
- Haiman, John. (1985) Natural syntax. London : Cambridge University Press.
- Hass, Mary. (1972) The expression of the diminutive. Studies in linguistics in honour of Trager.  
Hague.Paris : Mouton & Co.
- Jacobson, R. & Waugh, L. (1979) The sound shape of language. Bloomington : Indiana University Press.
- Jespersen, Otto. (1922) Language: its nature, development & origin. London : George Allen & Unwin Ltd.
- Ladefoged, Peter. (1975) A course in phonetics.  
U.S.A. : Harcourt Brace Jovanovich, Inc.
- Luksaneeyanawin, Sudaporn. (1984) Some semantic functions of reduplicatives in Thai. In Tuajchareon P. (et

- al). Selected papers from the 1st international symposium on languages and linguistics. Chiangmai University Press.
- Luangthongkum, Theraphan. (1979) Iconicity of vowel qualities in Northeastern Thai reduplicated words. In Luangthongkum (et al), Studies in Tai and Mon-Khmer phonetic and phonology in honour of Eugenie J.A. Henderson. Bangkok : Chulalongkorn University Press.
- Lyons, John. (1977) Semantics, vol. 1 & 2. London : Cambridge University Press.
- Sapir, Edward. (1949) A study in Phonetic Symbolism. In Mandelbaum, D. (ed.) Selected writings of Edward Sapir in language, culture and personality. California : University of California Press.
- Samarin, William J. (1970) Inventory and choice in expressive language. Word 29, 153-169.
- Ullmann, Stephen. (1967) An introduction to the science of meaning. Oxford : Basil Blackwell.
- Ullan, Russell. (1971) Size-sound symbolism. In Greenberg (ed.) Universals of human language, vol.2. Standford : Standford University Press.



*In Chinese :*

Guangxi. The Committee of the language studies of the Guangxi Zhuang Minorities, (ed.). (1989) Vujingz Vahceungh Yij Faz. Guangxi : Guangxi Nationality Publisher.

Liang Min (197?) A study of the post-position syllables in adjectives, nouns and verbs of the Zhuang language. (source of periodical unknown, copy available at the library of the Department of linguistics, Faculty of Arts, Chulalongkorn University.)

Qin Guosheng. (1979) The suffixes of verbs and adjectives in Liu-Jiang dialect of Zhuang language. In Minzu Yuwen Quarterly No.4, 1981. pp.51-56.

(the Thai version of this article is seen in Kullavanijaya, P. (ed.), Zhuang : the Tai people in the People's Republic of China, vol. 1.

Wei Qinyin & Qin Guosheng. (1979) Zhuang Yu Jian Zhi. Peking : Minzu Chubanshe Press.

*In Thai :*

Kullavanijaya, Pranee. (1986) Zhuang : the Tai people in

the People's Republic of China, vol. 1.

Bangkok : Chulalongkorn University Press.

Kullavanijaya, P. & Luangthongkum, T. (1986) Debao --- a  
Zhuang dialect. In Kullavanijaya, P. (ed.),

Zhuang : the Tai people in the People's Republic  
of China, Vol. 1.

\_\_\_\_\_. (1992) Southern Zhuang-Thai Dictionary.

Bangkok : Chulalongkorn University Press.

Luksaneeyanawin, Sudaporn. (1982) Euphonic couplets :  
another aspect of Thai phonology and semantics.

Journal of letters 14.1., Faculty of Arts.

Bangkok : Chulalongkorn University Press.

The two articles of Dr. Sudaporn are also collected  
in her book titled " สัทศาสตร์และภาษาศาสตร์ ".

printed in 1986, by Tech-Press Service Co. Ltd.

Meng Wan-Biu (1989). Reduplicatives in the Debao Dialect  
of the Zhuang language. in Kullavanijaya, P. (ed.),  
Zhuang : the Tai people in the People's Republic of  
China, Vol. 1. Bangkok : Chulalongkorn University  
Press.

Udomanisuwat, A. (1982) Relations of vowel patternings and  
meanings of disyllabic reduplicatives in Thai.

M.A. thesis for the Department of Linguistics,  
Chulalongkorn University.

## Appendix I

## Abbreviations

CT	contour tone category
LT	level tone category
h	high pitch type
l	low pitch type
T	one of the six tonemes in the Debao dialect.
T $\emptyset$	no tonal configuration
TS	tallied syllables
C <sub>r</sub>	reiterated initial consonants of the TS
C <sub>r</sub>	selected finals of the TS
C <sub>N</sub>	finals with a nasal
C <sub>s</sub>	finals with an unreleased stop
C $\emptyset$	initial consonant of the TS that has no phonological link with that of HD
HD	headword
Vi	iconic vowel
V:	long monophthong
V <sub>1</sub> V <sub>2</sub>	diphthong
[ ]	indicating a semantic component
{ }	boundary of a set
$\emptyset$	empty set
<:)	passage marker
-----	showing the formation of a lexical construction with the tallied syllables by using a certain headword

## Appendix II

Wordperfect 5.1

Debao Alphabet

IPA symbols

## consonants:

m	m	m
n	n	n
ŋ	ng	ŋ
ph	p	p <sup>h</sup>
th	t	t <sup>h</sup>
kh	k	k <sup>h</sup>
p	b	p
t	d	t
ts	ts	ts
k	g	k
?	-	?
?w	rv	?w
?j	ry	?j
b	mb	b
d	nd	d
f	'f	f
s	s	s
ʃ	c	ʃ
h	h	h
j	y	j
w	v	v
l	l	l
ʔ	r	ʔ
6	ø	e

## Vowels :

i	i	i
e	e	e
a	ɹ	a
u	u	u
o	o	o
ɯ	w	ɯ
ɔ	ø	ɔ
ə	ø	ə



## Appendix III

@ is used to mark those tallied syllables that can undergo the process of complete reduplication. All the entries are arranged by the first letter of the headword and in the order of nasals, plosives, fricatives and approximants (see Table 1.1).

@	mai	31	<i>in a stuporous state</i>	
	mai	31	mm̩t 33	unusually stuporous
	min	33	<i>well cooked</i>	
	min	33	mje:t 33	cooked till soft as of stew
	min	33	mja:t 33	cooked till soft as if melting
	mo:	55	<i>to stroke with hands</i>	
	mo:	55	me: 325	to stroke with the hands repeatedly
	mo:k	55	<i>mist</i>	
	mo:k	55	me:k 55	quite misty and hazy
@	mja:	31	<i>mushy</i>	
	mja:	31	mm̩t 33	having an unusually mushy texture
	naŋ	33	<i>to sit</i>	
	naŋ	33	na:k 33	urging someone to take a seat
	nap	33	<i>to smash with the feet</i>	
	nap	33	ne:p 33	to smash with the feet repeatedly
	ne:m	52	<i>to paste</i>	
	ne:m	52	neŋ 55	to paste casually
	nip	55	<i>to fasten together with a pin or staple</i>	
	nip	55	neŋ 55	to pin or clip together casually
	niu	52	<i>sticky</i>	
	niu	52	ne:t 55	rather sticky



	no:	52		<i>to cultivate a plant</i>	
	no:	52	neꞤ	55	to cultivate a plant casually
	nꞤk	55		<i>adhesive, glue-like</i>	
	nꞤk	55	ne:t	55	moderately adhesive, as paste
	nꞤk	55	na:t	55	very adhesive, as of glue
	nuꞤ	325		<i>tough, chewy</i>	
@	nuꞤ	325	ne:t	55	chewy
@	nuꞤ	325	na:t	55	tough texture
	nja:Ꞥ	55		<i>coarse-grained</i>	
	nja:Ꞥ	55	njꞤt	55	unusually coarse grained
	nja:p	55		<i>elastic</i>	
	nja:p	55	njꞤt	55	unusually elastic
	njan	55		<i>of stunted growth</i>	
@	njan	55	nje:t	55	rather stunted
	njau	55		<i>worried</i>	
	njau	55	njꞤt	55	very depressed
	njo:u	325		<i>wrinkled</i>	
	njo:u	325	njꞤt	55	crinkled and wrinkled
	njuꞤ	325		<i>untidy</i>	
	njuꞤ	325	njꞤt	55	annoyingly unkempt
	njuꞤ	325	nje:t	55	very unkempt
	njuꞤ	325	nja:t	55	disheveled
	Ꞥa:Ꞥ	213		<i>foolish looking</i>	
@	Ꞥa:Ꞥ	213	ꞤꞤt	33	looking very foolish
	Ꞥa:u	31		<i>boiling for a long period of time</i>	
	Ꞥa:u	31	Ꞥe:t	33	being boiled for quite a long period of time
	Ꞥai	31		<i>to pry open</i>	
	Ꞥai	31	Ꞥe:t	33	prying with some effort
	Ꞥai	31	Ꞥa:t	33	prying with much effort
	Ꞥau	31		<i>well-polished, shiny</i>	
	Ꞥau	31	ꞤꞤt	33	unusually shiny



	ŋiŋ	325	<i>weak and small</i>		
@	ŋiŋ	325	ŋe:t	55	being weak and small
	ŋo:k	55	<i>(peak of mountain)</i>		
	ŋo:k	55	ŋwe:k	55	rugged and rough
	ŋwei	31	<i>dangerous</i>		
	ŋwei	31	ŋwe:k	33	in great danger
	pha:n	325	<i>to entwine</i>		
	pha:n	325	phem	55	to entwine casually
	pha:n	325	phe:	325	entwined around and around
	pho:	33	<i>broken</i>		
	pho:	33	phe:	325	broken into pieces
	pho:	33	phem	33	broken by accident
	kha:	325	<i>to kill</i>		
	kha:	325	khe:	325	to kill incessantly
	kha:	325	khem	55	to kill casually
	kha:t	33	<i>torn</i>		
	kha:t	33	khe:	325	worn and torn in pieces
	kha:t	33	khem	33	torn and broken
	kha:t	33	khe:t	33	torn and broken as of the threads on a loom
	kha:u	31	<i>white-colored</i>		
	kha:u	31	nje:t	55	a little whiteness,
	kha:u	31	nja:t	55	very white, pejorative sense
@	kha:u	31	ʃe:k	33	white-colored, small object
@	kha:u	31	ʃa:k	33	white-colored, big object
	kho:t	33	<i>to tie knots</i>		
	kho:t	33	khem	33	to tie up knots casually
	kho:t	33	khe:t	33	covered with knots
	khun	31	<i>bitter</i>		
@	khun	31	kha:ŋ	33	taste rather bitter
	khwa:ŋ	31	<i>confronting, lying in the way</i>		
	khwa:ŋ	31	khweŋ	33	somewhat impeding one's way

	pa:i	325	<i>be defeated</i>				
	pa:i	325	pe:	325	to flee	in	all directions
@	pei	31	<i>fat</i>				
	pei	31	pmt	33	unpleasantly		fat
@	pa:	52	<i>to pat soil</i>				
	pa:	52	pmt	55	the way and manner of		patting soil
@	po:ŋ	31	<i>swelling up in size</i>				
	po:ŋ	31	pmt	33	puffy and soft		
	po:ŋ	31	pe:t	33	swollen in size		
	pok	55	<i>to thrust in</i>				
	pok	55	pa:k	55	to thrust in with force		as of sticks in the sand
	pok	55	peŋ	55	to thrust in casually		
	pa:n	325	<i>to plaster with a tool</i>				
	pa:n	325	pe:	325	to plaster with a small		action
	pa:n	325	pa:	325	to plaster with a bigger		action and area
	pa:n	325	peŋ	55	to plaster casually		
	pa:n	33	<i>to creep about</i>				
	pa:n	33	pe:	213	to creep about as of ants		
	pa:n	33	pa:	213	to creep about as of big		animals
	pa:n	33	peŋ	33	to creep about casually		
	tam	33	<i>to stamp one's feet</i>				
	tam	33	teŋ	33	to stamp		casually
	to:n	213	<i>to move an object around</i>				
	to:n	213	teŋ	33	to move around		casually
	tup	33	<i>to pound</i>				
	tup	33	teŋ	33	to pound		casually
@	tŋn	325	<i>short</i>				
	tŋn	325	te:t	55	rather short		



	tsa:	31	<i>coarse-grained</i>		
@	tsa:	31	nje:t	55	unrefined
@	tsa:	31	nja:t	55	with a coarse surface
	tsa:i	325	<i>being slanted to one side</i>		
	tsa:i	325	ŋa:k	55	very much slanted
	tsam	213	<i>cool</i>		
	tsam	213	ʃe:ŋ	33	rather coolness
	tsam	213	ʃa:ŋ	33	very coolness
	ka:	31	<i>to be blocked</i>		
	ka:	31	ke:	31	to be blocked repeatedly
	ka:	31	keŋ	33	to be stuck casually
	ka:u	31	<i>to cause trouble</i>		
	k:au	31	ke:	31	to cause trouble incessantly
	ka:u	31	keŋ	33	to cause trouble casually
	kan	213	<i>to knead</i>		
	kan	213	ke:	213	to knead repeatedly
	kan	213	keŋ	33	to knead casually
	kat	55	<i>cold</i>		
	kat	55	ʃe:ŋ	33	• perceptibly cold
@	kat	55	t6e:t	55	rather cold
@	kat	55	t6a:t	55	colder to a greater degree
	ke:	55	<i>deep color</i>		
	ke:	55	nja:k	55	dark hue
	ke:	55	nja:t	55	not fresh looking
	ke:	55	nje:t	55	unfresh, small object
	ko:	31	<i>arched</i>		
@	ko:	31	ŋe:ŋ	55	less arched
@	ko:	31	ŋa:ŋ	55	more arched
	kot	33	<i>crooked</i>		
@	kot	33	ŋa:ŋ	55	crooked as of branches
@	kot	33	ŋe:ŋ	55	crooked as of twigs
	ke:n	55	<i>hard, strong</i>		
@	ke:n	55	ka:k	55	texture being hard

kjau	325	<i>to stir up</i>		
kjau	325	keɪ	55	to stir up casually
kja:u	31	<i>to ask for a favor</i>		
kja:u	31	ke:	31	to ask for a favor repetitively
kwan	213	<i>to take a walk off route</i>		
kwan	213	kwe:ɪ	33	to be off route within a scope
kwan	213	kwe:	213	to be off route on and on
kwaŋ	213	<i>to hover</i>		
kwaŋ	213	kwe:	213	to hover above on and on as of an eagle
?a:	325	<i>to open agape</i>		
@ ?a:	325	ŋwe:p	33	smaller gape
@ ?a:	325	ŋwa:p	33	bigger gape of the mouth
?ot	55	<i>to fill up a cavity</i>		
?ot	55	?eɪ	55	to fill up in a hurry or casually
?jap	55	<i>to wink</i>		
?jap	55	?je:p	33	twinkling
?wa:ŋ	33	<i>to roam</i>		
?wa:ŋ	33	?wa:	325	roaming faraway
?we:ŋ	33	<i>to loiter</i>		
?we:ŋ	33	?we:	325	to loiter at close distance
ba:	31	<i>flat</i>		
@ ba:	31	bɪt	33	short and fat

	be:u	325	<i>warped</i>		
	be:u	325	ŋa:k	55	very much warped
	be:u	325	be:t	55	being coiled and warped
	bup	55	<i>notched</i>		
	bup	55	be:ŋ	33	covered with craters
	bup	55	be:p	33	pitted with pot-holes
	bup	55	khwa:k	33	much notched
	bup	55	khwe:k	33	slightly notched
	da:	325	<i>to mix together</i>	<i>as of grains</i>	
	da:	325	deŋ	55	to mix the grains up casually
	dam	31	<i>black color, dark</i>		
@	dam	31	nja:m	55	a feeling of being in darkness
@	dam	31	nje:m	55	a feeling of darkness
	dam	31	nje:t	55	black colored
	dam	31	nja:t	55	a soot-black hue of black color
	dam	33	<i>gritty, sandy</i>		
	dam	33	de:	33	being gritty, sandy
	de:ŋ	325	<i>exposed under the sky</i>		
	de:ŋ	325	da:ŋ	325	displayed and exposed openly
	duk	33	<i>bone</i>		
	duk	33	da:k	33	emaciated looking
	dmt	33	<i>to kick</i>		
	dmt	33	da:t	33	kicking wildly in the air
	fat	33	<i>to flutter</i>		
	fat	33	fem	33	to flutter casually
	fo:u	31	<i>to float</i>		
@	fo:u	31	fe:ŋ	33	small objects floating
@	fo:u	31	fa:ŋ	33	big objects floating
	fmn	213	<i>to squeeze</i>		
	fmn	213	fe:	213	cause to overflow continuously



	fɯn	213	fɛn	33	squeezed to flow out casually
	sei	325	<i>to tear apart</i>		
	sei	325	sa:	325	to tear apart with force
	sei	325	seɯ	55	to tear apart casually
	som	325	<i>sour</i>		
@	som	325	pja:m	33	a strong sensation of sourness
@	som	325	pje:m	33	a lesser sensation of sourness
@	som	325	sa:t	33	greater sourness, as of fruits
@	som	325	se:t	33	lesser sourness, as of fruits
	suŋ	52	<i>high, tall</i>		
@	suŋ	52	kwa:ŋ	33	tall, high as of a big object
@	suŋ	52	kwe:ŋ	33	tall, as of a small object
	{a:m	31	<i>to pierce into</i>		
	{a:m	31	ɸem	33	to pierce into casually
	{a:m	31	ɸa:k	33	to pierce in with force
	{e:t	33	<i>to cut up, to slice</i>		
	{e:t	33	ɸem	33	to cut up casually
	{i:	325	<i>to tear apart</i>		
	{i:	325	ɸem	55	to tear apart casually
	{i:	325	ɸa:ŋ	325	to tear with force
	ɸuŋ	33	<i>at dawn</i>		
	ɸuŋ	33	ɸe:k	33	brightening as at dawn
	ɸuŋ	33	ɸa:k	33	more brightening
	ha:ŋ	33	<i>apart</i>		
	ha:ŋ	33	nja:k	55	uneven, not in close order
	jup	33	<i>to dip as into sauce</i>		
	jup	33	je:p	33	movement of dipping into sauce

wa:	31	<i>to snatch in the air</i>		
wa:	31	weɪ	33	to snatch within a scope
wa:	31	wa:k	33	to snatch at with force, big action
wa:	31	we:k	33	to snatch at, small action
wa:	52	<i>to brandish in the air</i>		
wa:	52	weɪ	55	to brandish casually
wa:	52	wa:ŋ	325	to brandish a weapon, bigger scope
wa:	52	we:ŋ	325	to wield a weapon, smaller scope
wa:t	55	<i>to dig</i>		
wa:t	55	wa:ŋ	325	to dig up for search thoroughly
wa:t	55	wa:	325	to dig up and search randomly
wai	55	<i>lost during the process of delivery</i>		
wai	55	we:ŋ	325	unable to relocate something
wai	55	wa:ŋ	325	object lost during delivery
wai	55	wa:t	55	lost in the course of delivery
wak	33	<i>to pick up with a hook</i>		
wak	33	weɪ	33	to hook up casually
wak	33	we:k	33	being hooked by thorns
wan	213	<i>to detour</i>		
wan	213	we:	213	to continue detouring
we:	33	<i>to draw lines</i>		
we:	33	wa:k	33	to draw with strength
we:	33	weɪ	33	to draw lines casually
we:ŋ	55	<i>to become frayed</i>		
we:ŋ	55	we:	325	continued to become frayed
wɪt	55	<i>to push aside</i>		
wɪt	55	wa:ŋ	325	to push aside in big action, as if walking thru thick groves

wmt	55	we:ŋ	325	to push aside with small action as of birds picking out seeds with the beak
wmt	55	wa:t	55	the manner of searching
la:	31	<i>to strike</i>		
la:	31	leŋ	213	to strike with smaller weapon
la:	31	laŋ	213	to strike with larger weapon
la:n	31	<i>to stop by blocking</i>		
la:n	31	le:	213	to stop by blocking one's way repeatedly
la:n	31	la:	213	to block the way with a large object
la:n	33	<i>to overdo something</i>		
la:n	33	la:	213	extravagant
lan	33	<i>to roll</i>		
lan	33	leŋ	33	to roll casually
la:p	33	<i>to sweep up with one's arm, as if off a table</i>		
la:p	33	le:	213	to sweep up a smaller number of objects
la:p	33	la:	213	to sweep up more objects
lak	33	<i>to steal</i>		
lak	33	le:	213	to steal again and again
lak	33	le:k	33	in a stealthy manner
laŋ	33	<i>greasy and waxy</i>		
laŋ	33	lmt	33	greasy and waxy, as of unwashed clothes
lam	55	<i>to make mistakes</i>		
lam	55	le:	325	making errors repeatedly
lat	55	<i>to taper, to whittle</i>		
lat	55	leŋ	55	to taper a twig casually
lau	31	<i>smooth and slippery</i>		
@	lau	le:t	33	smooth, as of noodles
@	lau	la:t	33	slippery, as of the floor
@	lau	lmt	33	unusually slippery



lau	213	<i>to coax</i>			
lau	213	le:	213	to coax a child repeatedly	
la:u	33	<i>to cut down trees</i>			
la:u	33	le:	213	to cut down a smaller plantation of trees	
la:u	33	la:	213	to cut forest with no restraint	
la:u	33	leꞤ	33	to fall trees casually	
le:u	52	<i>watery, thin</i>			
@	le:u	52	le:t	55	being thin and watery
li:n	33	<i>to linger</i>			
li:n	33	le:	213	to linger on and on	
lom	31	<i>to forget</i>			
lom	31	leꞤ	33	to forget casually	
lom	31	la:	213	having forgotten a lot	
lop	33	<i>to apply with a swab</i>			
lop	33	le:	213	to apply with a swab, smaller action	
lop	33	la:	213	to apply with a swab, larger action	
lum	33	<i>to grope in the dark</i>			
lum	33	le:	213	to grope in the dark, closer distance	
lum	33	la:	213	to grope in the dark, a larger space	
lu:t	55	<i>get loose and fall off</i>			
lu:t	55	le:t	55	less things to fall off	
lu:t	55	la:t	55	get loose, more objects falling off	

## Vita

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