

Chapter 4

The Secondary System of Iconicity

In this chapter the Secondary System will be analysed as another system of the principle of iconicity, which shows a distinction in terms of syllabic structure, phonological patterns and semantic properties. The same parameter of the paradigmatic and syntagmatic relations will still be employed in this chapter.

4.1 The Secondary System

The syllable structure of the Secondary System differs from that of the Primary System in that the tallied syllable has to be a closed syllable, either being a checked syllable with an obstruent as final, or being an open syllable with a sonorant final.

The different structural formation of the tallied syllables accordingly brings along a different domain of semantic functions, since the final consonants of the tallied syllables in the Secondary System convey extra senses to the lexical constructions.



The tallied syllables of the Secondary System would be productive only to a relative degree. A major part of the data is productive when there is a phonological link between the headword and the tallied syllables. When there is no such phonological relationship between the headword and the tallied syllable, the tallied syllable shows a collocational occurrence with the headword¹. This later type of tallied syllable is non-productive.

The consonant finals are found to give certain restricted and subclassifying senses to the meaning of the tallied syllable which is given by the iconic vowels.

For example:

(a) kha:t 33 khe: 325
worn and torn in pieces

(b) kha:t 33 khe:t 33
torn and broken to a certain degree

In (a) the open syllable /khe: 325/ with the iconic

¹Cruse, D.A. (1986:107) specifies the collocational restrictions as one type of semantic dissonance defined by syntagmatic and paradigmatic relations of sense.

vowel /e/ indicates the extended shade of diminutive meanings --- [repetitiveness], while in (b) the final /-t/ of the tallied syllable adds in the restrictive sense of [degree].

For another example:

(c) lak 33 le: 213
engaged in habitual stealing activity

(d) lak 33 le:k 33
in a stealthy manner

The open syllable /le:/ in (c) with vowel /e:/ indicates the extended meanings of diminutives ----- [repetitiveness].

In (d), the tallied syllable /le:k 33/ with a final /-k/ restricts focus to one special part of the head-word's semantic features. That is, 'stealthiness' is not the action of stealing something, but represents one of the semantic features involved with the actions of stealing.

The tallied syllable thereby has modified the se-

mantic function of an action into a descriptive attributive of a behaviour.

The tallied syllables in the Secondary System reveals the "adjectival function", which engages the tallied syllables in describing and specifying the qualities, attributes or degrees of the referents. The tallied syllables of the Primary System are seen mostly functioning in modifying the meanings of the headwords.

The headwords of the Primary System are mostly non-stative verbs, hence the tallied syllables function with a modifying sense.

The headwords of the Secondary System are mostly adjectives, or stative verbs, hence the tallied syllables function with a qualifying sense².

For example:

(a) pa:n 325 *to plaster with a tool*

² *I use the concept of Leech (1974:146) on distinguishing 'adjectival' and 'adverbial' functions in syntax to discuss the semantic variations of the two systems in the tallied syllables.

pa:n 325 pe: 325
to plaster with small action

The headword /pa:n 325/ is a non-stative verb, indicating the action of plastering. The tallied syllable /pe: 325/ modifies one of those aspects of the action in plastering.

(b) tmn 33 *short in size*

tmn 33 te:t 55

specifying the quality of being short in size

The headword /tmn 33/ is an adjective indicating the many semantic features of being short in size. The tallied syllable /te:t 55/ specifies the quality of being short in size, in various aspects of degree, intensity or focus.

4.2 Reduplication in the Secondary System

The tallied syllables in the Primary System are absolutely monosyllabic as reduplication of the tallied form

is ungrammatical. A part of the data in the Secondary System is also monosyllabic, but another part is admitted to undergo the universal process of reduplication.

The reduplication pattern increases some added quantity of emphasis. Most of this kind of tallied syllables belong to the non-productive type II of the Secondary System.

Here is an example of complete reduplication of a tallied syllable:

pja: 52 lai 52 ?a: 325 ŋwa:p 33 (ŋwa:p 33).

fish many gasping for air

= Many fish that are moving their mouths repeatedly, are gasping for air

All of the tallied syllables that are found to be acceptable for the complete reduplication are marked with the symbol @ in the data listed in Appendix III. I have excluded the study of reduplicatives in this study, as it represents actually another domain of iconicity not

included in the scope of my study.

4.3 Phonological Properties

It has been mentioned that the phonological structure of this set of tallied syllables is limited to closed syllable. The segments of the tallied syllable consists of the initial consonant, the vowel, the consonant final and the tones. Each of the segments will be discussed below.

4.3.1 The Consonants

The consonants can be divided as initial consonants and final consonants.

(a) The initial consonants

In the Secondary System, the same process of linking between the initial consonant of the headword and the tallied syllable which produces productivity is active in some lexical constructions.

(b) The final consonants

The consonants that can occur as the finals of the tallied syllables in the Secondary System are listed as

such:

Sonorant finals : { /-m/, /-ŋ/ }

Obstruent finals : { /-p/, /-t/, /-k/ }

/ŋ/ is the major nasal final that occurs in the Secondary System; /-m/ occurs in very low frequency, and is found only with the non-productive type of lexical construction. Acoustically and auditorily speaking, the sonorants and the obstruents are very different; and this is also true semantically (for a detailed discussion see section 4.5.1).

The syllable structure of the tallied syllables in the Secondary System can thus be divided into two categories, the CVN, which is the sonorant ending syllables with the nasals as finals and the CVS, which is the obstruent ending syllable with stops as finals.

4.3.2 The Vowels

The set of iconic vowels in the Secondary System includes the following members:

{ /a:/, /e:/, /ɪ/ }

These vowels in the Secondary System can also be divided into 2 subsets according to the outstanding behav-

four of the vowel /ɯ/, which mostly occurs in one type of the tallied syllables and is restricted to co-occurrence with the final /t/. It is listed as a unique member in the set of vowel labeled as Set 2.

The contrastive occurrence of /a:/ and /e:/ as vowel ablaut is also dominant in the secondary system. These two vowels are included in the set of vowels labeled as Set 1. Each of the iconic vowels is inherent with some fixed values as listed in Table 4.2.

4.3.3 The Tones

The tone shape category of the tallied syllables in the Secondary System also depends on the syllable structure of the tallied syllable, whether it is a CVN or CVS syllable. If the tallied syllable is a sonorant-ending syllable (CVN), the tone shape category will be a (CT) contour tone category. On the contrary, if the tallied syllable is an obstruent ending syllable (CVS), the tone shape category will be a (LT) level tone category.

The general rule of tonal configuration between the pitch type of the headword and the tone shape category of the tallied syllable also applies in the Secondary System for the productive type of tallied syllables (see section

3.3.3.1). For example:

Contour Tone Category (CT) :

de:ŋ 325	-----	de:ŋ 325	da:ŋ 325
<i>be exposed</i>		displayed and exposed	openly
wai 55	-----	wai 55	wa:ŋ 325
<i>lost during delivery</i>		object lost during	delivery
wa: 52	-----	wa: 52	wa:ŋ 325
<i>to brandish in the air</i>		to brandish a	weapon,
la: 31	-----	la: 31	laŋ 213
<i>to strike</i>		to strike with	bigger weapon

The tones of the headwords belonging to the high pitch type are /325/, /55/ and /52/; those belonging to the low pitch type are /31/, /213/ and /33/. But in my data, examples with /213/ and /33/ are not available.

In these examples, the configuration between the CT category of the tallied syllable and the pitch types of the headword will decide the corresponding tones of the tallied syllables as underlined. The CT category consists of only /213/ and /325/ as its members, hence either /325/ or

/213/ will be chosen.

Level Tone Category (LT):

be:u	325	-----	be:u	325	be:t	55
	<i>warped</i>			being coiled and	warped	
ŋo:k	55	-----	ŋo:k	55	ŋwe:k	55
	<i>peak</i>			rugged and	rough	
le:u	52	-----	le:u	52	le:t	55
	<i>watery, thin</i>			being thin and	watery	
ŋa:ŋ	213	-----	ŋa:ŋ	213	ŋmt	33
	<i>foolish looking</i>			looking very	foolish	
lak	33	-----	lak	33	le:k	33
	<i>to steal</i>			in a stealthy	manner	
ʃa:m	31	-----	ʃa:m	31	ʃa:k	33
	<i>to pierce into</i>			to pierce in	with force	

In the examples above, the tones of the headwords belonging to the high pitch type are /55/, /52/ and /325/; those belonging to the low pitch type are /31/, /33/ and /213/. The configuration between the pitch types of the LT



category and the pitch types of the headwords will decide the corresponding pitch for the tones of the tallied syllables as underlined. Since the LT category consists of only /33/ of low pitch type and /55/ as high pitch type, either /55/ or /33/ will be chosen for the match.

The same notations CT{h/l} and LT{h/l} will be used in the Secondary System to denote tonal configuration in the contour tone category and the level tone category. Table 4.1 below will summarize the rule of tonal configuration:

HD Tone = tone of the headword

TS Tone = configured tone of the tallied
syllable

CVN = sonorant ending syllable

CVS = obstruent ending syllable

config. = tone configuration

Vowel Set 1 CVN = VV + { -ŋ } Contour Tone Category		Vowel Set 1, Set 2 CVS = VV + { -p, -t, -k } Level Tone Category	
HD Tone	TS Tone	HD Tone	TS Tone
High Pitch Type	config.	High Pitch Type	config.
325	325	325	55
55	325	55	55
52	325	52	55
Low Pitch Type	config.	Low Pitch Type	config.
213	213	213	33
33	213	33	33
31	213	31	33

Table 4.1 The tonal configuration between tone shape categories and tone pitch types in the Secondary System.

4.4 Types and Patterns of Tallied Syllables in the Secondary System

The tallied syllables of the Secondary System are roughly categorized into two types, each of which follows

its own pattern of formation. Both types are classified by the criteria of phonological link, from the aspect of syntagmatic relationship between the headword and the tallied syllables. The two types are defined as type I and type II.

Type I : the tallied syllable abides by the phonological constraint of the initial consonant and of the tonal configuration.

Type II : the tallied syllable is with no phonological constraint of any kind with the headword. The vowels and consonant finals are selected on semantic basis. LT is the only tone category occurring in this type of tallied syllables. There is no tonal configuration.

Type I has two patterns that are based upon the selection of tone shape category and upon different capacity to occur with different sets of vowels and specified types of finals.

Type I :

(i) CVC T + C_r V(1,2) C_s T_e
T_e = LT {h/l}

(ii) CVC T + C_r V(1) C_N T_e
T_e = CT {h/l}

CVC τ = a prototype of syllable structure of
the Debao dialect

V(1,2) = Vowel Set 1 and Vowel Set 2

V(1) = Vowel Set 1 only

C_r denotes the reiteration of the initial C of
the headword.

C_s = consonant finals with unreleased stops

C_N = consonant finals with nasals

T_c = tonal configuration

The major difference between the two patterns lies in the selection of LT or CT as tone shape category of the tallied syllable. The syllable structure of the tallied syllable affects the pattern of tallied syllable formation in Type I. The finals, whether it is a nasal /-ŋ/ or an unreleased stop from the set {/-p/, /-t/, /-k/}, dictate the choice of the tone shape category for the pattern (cf. 4.3.1.(b)).

The discrimination between Type I and Type II of tallied syllables lies in the phonological correspondence on the part of the initial consonant and in the tonal configuration of the tallied syllable in Type I.

Type II

$$\text{CVC } T + C\emptyset \text{ Vi } C_r \text{ } T\emptyset$$

$$T\emptyset = \text{LT}$$

CVC T = a prototype of syllable structure of the
Debao dialect

C_r = the consonant final, with no specification

$C\emptyset$ = no phonological link exists between the
initial consonant of the headword and that of the tallied
syllable.

$T\emptyset$ = no tonal configuration between the pitch
type of the headword and the tallied syllable.

It can be seen that in Type II, the tallied syl-
lables are collocative rather than productive. The
finals do not affect change in tone shape category while
there is no tonal configuration. The basic tone shape cat-
egory for Type II is LT (level tone category).

4.4.1 The Two Patterns of Type I

According to the formula provided at section 4.4,
more examples are provided below to illustrate the 2 pat-
terns of Type I. {/a:/, /e:/} of Set 1 occurs in both
patterns, but {/m/} of Set 2 can only occur in pattern (i).

(a) Pattern (i) of Type I

<:) Vowel Set 1

wa: 31 *to snatch at something*

----- wa: 31 we:k 33
 to snatch with small action

----- wa: 31 wa:k 33
 to snatch with big action

be:u 325 *warped*

----- be:u 325 be:t 55

being warped as of the goat's horn

naŋ 33 *to sit*

----- naŋ 33 na:k 33

urged randomly to take a seat.

<:) Vowel Set 2 :

laŋ 33 *greasy*

----- laŋ 33 lmt 33

greasy and waxy as of unwashed clothing

(b) Pattern (ii) of Type I

<:) Only Vowel Set 1 occurs in this pattern

la: 31 *to strike*

 la: 31 le:ŋ 213
 to strike within larger scope

 la: 31 la:ŋ 213
 to strike with weapon or fist

de:ŋ 325 *exposed under the sky*

 de:ŋ 325 da:ŋ 325
 exposed and displayed in the open air

4.4.2 The Pattern of Type II

There is only one pattern representing the non-productive category of tallied syllables in the Secondary System.

Without a formal phonological constraint that links the headword to the tallied syllable, the frequent presence of the ablauting vowels /e:/ vs /a:/ serve as the key medium to connect these group of tallied syllables into the framework of the iconicity system.

?a: 325 *to open agape*

 ?a: 325 ŋwe:p 33
 the motion of a big fish moving its mouth

----- ?a: 325 ŋwa:p 33
 the motion of a small fish gaping its mouth

kat 55 *cold*

----- kat 55 ʃe:ŋ 33
 perceptibly cold as of water in a pond

be:u 325 *warped*

----- be:u 325 ŋa:k 55
 very much warped

khe:u 31 *stinking smell*

----- khe:u 31 ʃmt 33
 strong bad smell

4.5 Semantic Properties in the Secondary System

The semantic properties revealed by the tallied syllables include iconic values of the vowels and the subclassifying senses of the finals.

4.5.1 Semantic properties of the finals

Based on the principle of contrasting among re-occurring segments such as the finals across a number of

lexical constructions, the common semantic entities between those forms will be detected and listed as the major semantic components of distinction. A comparative study of all the /-t/ finals for example, can bring recognition to its dominating senses which are subclassifying rather than indicative.

For example, the distinguishing senses of /-m/ and /-t/ can be detected by comparing the contrastive sets that have the same headword.

dam	31	nja:m	55
dam	31	nje:t	55

The headword is dam 31 (dark), "dam 31 nje:m 55" indicates a feeling toward the darkness. "dam 31 nja:t 55" refers to hue of black color as of the soot. It is found that /-m/ refers much to the tangibility of sensation and feeling whereas /-t/ specifies a description of qualities.

If we further compare the difference of /-m/ and /-t/ across two groups of tallied syllables with alternate vowels /a:/ and /e:/, the semantic function of the two finals obviously specifies and restricts the iconic values of the vowels with a subclassifying class of the senses. For examples:

(a) dam 31 nje:m 55

The feeling of darkness, as of inside a room

dam 31 nja:m 55

The feeling of darkness, as of inside a cave

The meanings of augmentatives and diminutives are still the core that discriminate this ablaut pair. Only that the addition of the final restricts the reference of the meanings to the sense of [feeling].

(b) dam 31 nje:t 55

black, as of the color of the hair

dam 31 nja:t 55

black, as of the color of clothings

This example shows that the final /-t/ subclassifies the contrastive meanings of AUG vs DIM into senses that refer to qualities.

The senses of the finals /-p/, /-t/, /-k/, /-m/, /-ŋ/, found in the Secondary System can be presented inside the brackets as semantic components and are summarized as follows:



/-p/ : [movement]

/-t/ : [quality], [degree]

/-k/ : [force], [intensification]

/-m/ : [feeling]

/-ŋ/ : [scope], [extent]

The senses indicated by the consonant finals of the tallied syllables in the Secondary System are illustrated with examples:

/-t/ [quality] or [degree]

The tallied syllable is used to describe or specify some qualities.

e.g. ba: 31 *flat and low*
 ----- ba: 31 bmt 33
 short and fat

/-k/ [force] or [intensification]

The tallied syllable is used to emphasize the concept of force, or intensification.

e.g. mo:k 55 fog
 ----- mo:k 55 me:k 55
 rather misty, hazy

/-ŋ/ [scope] or [extent]

The tallied syllable is used to refer to a scope, to a certain extent.

e.g. suŋ 52 tall, high
 ----- suŋ 52 kwa:ŋ 33
 being high and tall

/-m/ [feeling]

The tallied syllable is used to express an inner feeling of the speaker.

e.g. som 325 sour
 ----- som 325 pje:m 33
 a sensation of sourness

/-p/ [movement]

The tallied syllable is used to indicate repetitive movements. The articulatory movement of the lips, opening and closing incessantly when

producing the non-released /-p/ practically shows the rapid frequency of flickering, winking etc.

e.g. ?jap 55 to blink
 ----- ?ja:p 55 ?je:p 33
 twinkling

4.5.2 The Inherent Iconic Values of the Vowels

The iconic values of the vowels of the tallied syllables in the Secondary System can be extracted into semantic components.

The phenomenon of vowel ablaut is restricted to the vowels of Set 1. The single occurrence of /a:/ retains the polar values of augmentatives, while the single occurrence of /e:/ retains the polar values of diminutives, despite the polar values are preceded by the extended set of meanings.

/e:/ vs /a:/ [diminutive vs augmentative]

When this pair of iconic vowels occur in contrastive environment, the iconic values of augmentatives versus diminutives will be indicated.

e.g. wɪt 55 to push aside

----- wɪt 55 we:ŋ 325

smaller action, as of the birds picking up
seeds in the grass.

----- wɪt 55 wa:ŋ 325

bigger space and action, as of unpacking a
big luggage.

/a:/ [excessiveness]

When there is no contrastive pair, the iconic
vowel is in the single occurrence. It will
convey values implying an augmentative sense,
such as [excessiveness].

e.g. dɪt 33 to kick

----- dɪt 33 da:t 33

kicking wildly in the air.

/e:/ [specific detail]

A single occurrence of /e:/ also conveys values
implying diminutive sense such as [specific detail].

e.g. be:u 325 *warped*
 ----- be:u 325 be:t 55
 coiled and warped as of the goat's horn

/III/ [unusual characteristics]

This vowel only occurs by itself, and indicates some unusual characteristics of the reference.

e.g. ŋau 31 *shiny*
 ----- ŋau 31 ŋɪt 33
 shiny as of the forehead

The iconic values of the vowels of the tallied syllables in the Secondary System and the subclassifying senses indicated by the finals are summarized in Table 4.2.

Set	V	iconic values		subclassifying senses
1	a:	augmentative (polar occurrence) ----- (single occurrence) excessiveness, randomness	-p	movement
	e:	diminutive (polar occurrence) ----- (single occurrence) specific, repetitive, incessant	-t	quality, degree
2	III	(sole occurrence) unusual characteristics	-k	intensifi- cation, force
			-m	inner feeling
			-ŋ	scope, extent

Table 4.2 showing the iconic values inherent of each iconic vowel in the Secondary System, and the subclassifying senses associated with the finals.

Each of the iconic vowels has been seen to convey some iconic values. Besides this kind of semantic entities, there are other aspects of semantic functions in the pragmatic situations. Both the speaker and the hearer will correspond in the right channel with expressiveness on one end and impressiveness on the other end.

I will list one contextual occasion of using the contrastive meaning of /a:/ vs /e:/ in conveying the social sense.

- e.g. kat 55 *cold*
- (a) kat 55 t6e:t 55
 cold, but to a lesser degree of temperature
- (b) kat 55 t6a:t 55
 colder to a greater degree

(a) is mostly used by women, who will usually use only a finger to test the degree of temperature of the water in the river. (b) will be used by men, who usually will put the whole hand into the water. This is a social attitude of sexual discrimination in the Zhuang culture. Therefore in this case the degree of difference in the coldness of the water is not technically important. So in some cases, the single occurrence of an iconic vowel can be seen to reflect itself in various aspects of senses.

4.6 The Possible Occurrence of the Iconic Vowels
and the Finals

By theory each of the iconic vowels can combine with the finals that convey subclassifying senses as described in 4.5.1, but the actual occurrence between these two group of segments is restricted to the combination patterns between the two types of tallied syllables in the Secondary System.

TypeI	p	t	k	m	ŋ
a:/e:	-	+	+	-	+
a:	-	+	+	-	+
e:	+	+	+	-	-
III	*	+	-	*	-
TypeII	p	t	k	m	ŋ
a:/e:	+	+	+	+	+
a:	-	-	+	-	-
e:	-	-	-	-	+
III	*	+	-	*	-

Table 4.3 The possible occurrence between the iconic

vowels and the finals that lead to the formation of Type I and Type II tallied syllables.

+ marks the occurrence of a certain class of combination. - marks the non-occurrence of a potentially admissible construction of sound units. * marks an inadmissible construction of sound units. The gaps are worthwhile to be observed in light of future studies of these tallied syllables.

It should be noted that /-n/ as a final has not been found to occur with the iconic vowels in the Secondary System. /-m/ only found to occur with the non-productive type. /-ŋ/ only occur with those syllables formed by pattern (ii).

The iconic vowel /ɱ/ only occurs with /t/ but not any other finals.

4.6.1 The Examples of Type I

The examples of Type I which comply to the productive pattern as formalized at section 4.4 can be divided into 2 parts. The first part will include only those tallied syllables with the iconic vowels of Vowel Set 1, combining with different finals of /-p/, /-t/, /-k/ and /-ŋ/. The second part will present those tallied syllables with the

second part will present those tallied syllables with the individual iconic vowel /ɪ/.

(1) The ablaut pair

The examples are to illustrate the ablaut pair of /e:/ vs /a:/, indicating augmentatives vs. diminutives:

<:) occurring with /t/ that implies [quality],
[degree]

lu:t 55 *get loose and drop down*

----- lu:t 55 le:t 55

loose in space, causing a smaller quantity in a bundle to fall off

----- lu:t 55 la:t 55

too loosely fastened, more objects falling off

min 33 *to stew*

----- min 33 mje:t 33

well-cooked till the stew is soft.

----- min 33 mja:t 33

well-cooked till so soft as if melting in the mouth.



ηai 52 to pry

----- ηai 52 ηe:t 33
prying with less effort

----- ηai 52 ηa:t 33
prying with more effort

<:) occurring with /k/ that implies [force] or
[intensification]

wa: 31 to snatch at

----- wa: 31 we:k 33
to snatch with smaller action.

----- wa: 31 wa:k 33
to snatch with bigger action.

<:) occurring with /ŋ/ that implies [scope]
and [extent]

wa: 52 to wield a weapon

----- wa: 52 wa:ŋ 325
to wield within a bigger scope.

----- wa: 52 we:ŋ 325
to wield within a smaller scope.

wɪt 55 to push aside in order

to look for something

----- wmt 55 we:ŋ 325

smaller action, as of the birds
picking up seeds in the grass.

----- wmt 55 wa:ŋ 325

bigger space and action, as of
unpacking big luggage.

fo:u 31 *floating on the water*

----- fo:u 31 fa:ŋ 33

bigger objects floating on the water.

----- fo:u 31 fe:ŋ 33

smaller objects floating on the water.

Note: In the other 2 cases of unparallel selection of the tone category, " fo:u 31 fa:ŋ 33 " and " khum 31 kha:ŋ 33 " both appear frequently in disyllabic forms. This may be the reason to account for their usage of the LT tone category.

(2) the single occurrence of /a:/ and /e:/

If the /a:/ exists in a single occurrence, then it indicates senses extended from the augmentatives, such as

[randomness], [excessiveness],

<:) occurring with /t/ that implies [quality] or
[degree]

wai 55 *passed along and missing*

----- wai 55 wa:t 55

lost in the course of delivery,
focus on the object.

dmt 33 *to kick*

----- dmt 33 da:t 33

kicking wildly in the air

<:) occurring with /k/ that implies [force] or
[intensification]

naŋ 52 *to sit*

----- naŋ 52 na:k 33

to urge someone to be seated.

fa:m 31 *to pierce*

----- fa:m 31 fa:k 33

to pierce with big action

duk 33 *bone*

----- duk 33 da:k 33

emaciated

<:) occurring with /ŋ/ that implies [scope] or [extent]

de:ŋ 325 *exposed in the open air*
 ----- de:ŋ 325 da:ŋ 325
 displayed openly in the open air.

ʃi: 325 *to pull and stretch*
 ----- ʃi: 325 ʃa:ŋ 325
 to tear with a big action to a
 considerable extent.

khum 31 *bitter*
 ----- khum 31 kha:ŋ 33
 taste bitter to a considerable
 extent.

(b) The single occurrence of /e:/ indicates [specific], [incessant], [repetitive] details in describing something :

<:) occurring with /p/ that indicates repetitive movement.

?jap 55 to blink

 ?jap 55 ?je:p 33
 winkling

bup 55 dented

 bup 55 be:p 33
 pitted with pot-holes

nap 33 to step upon

 nap 33 ne:p 33
 to smash with the feet

jup 33 to dip into

 jup 33 je:p 33
 as of dipping into the soy sauce just a bit.

/-p/ is particularly noted for its special feature as connected with the articulatory of bilabial movement and also the interplay of sound units with the headword.

<:) occurring with /t/ that implies [quality]

kho:t 33 to tie a knot

 kho:t 33 khe:t 33
 being full of tied knots.

ŋa:u 31 *to boil for a long time*

----- ŋa:u 31 ŋe:t 33

having been boiled for a long time.

niu 52 *sticky*

----- niu 52 ne:t 55

being sticky.

le:u 52 *distilled*

----- le:u 52 le:t 55

watery and thin (liquid)

<:) occurring with /k/ that implies [force]

ŋwei 31 *dangerous*

----- ŋwei 31 ŋwe:k 33

in great danger.

lak 33 *to steal*

----- lak 33 le:k 33

in a stealthy manner

mo:k 55 *fog*

----- mo:k 55 me:k 55

misty, hazy

po:ŋ 31 *inflated*
 ----- po:ŋ 31 pmt 33
 puffy and soft

Note that the iconic vowel /ɯ/ only co-occurs with the final /t/, and not with any other consonant finals. This may verify that the iconic vowel has an intrinsic descriptive function of the unusual characteristics of things.

4.6.2 The Examples of Type II

(1) The ablaut pair of /e:/ vs /a:/ which suggest augmentative vs diminutive, seems to be the crucial element that connect the headword and the phonologically unrelated tallied syllable.

<:) occurring with /p/, indicating repetitious [movements]

?a: 325 *to open agape*
 ----- ?a: 325 ŋwe:p 33
 to open the mouth agape, as of a fish.
 ----- ?a: 325 ŋwa:p 33
 to open the mouth widely, as of a fish.

<:) occurring with /t/, indicating [degree] or [quality]

kha:u 31 *white-colored*

 kha:u 31 nje:t 55
 a bit of whiteness

 kha:u 31 nja:t 55
 very white, pejorative sense

ke: 55 *hue of unfreshness*

 ke: 55 nje:t 55
 unfresh looking, as of smaller objects

 ke: 55 nja:t 55
 unfresh looking, as of vegetables or face

tsa: 31 *rough surface*

 tsa: 31 nje:t 55
 unrefined

 tsa: 31 nja:t 55
 coarse, sense of against the grain

<:) occurring with /k/, indicating [force] or [intensification]. The concept of force in the limited examples here is realised through the medium of impressions.

bup 55 *notched, dented*
 ----- bup 55 khwa:k 33
 bigger notch on the surface
 ----- bup 55 khwe:k 33
 notched, dented on the surface

kha:u 31 *white-colored*
 ----- kha:u 31 ʃe:k 33
 white, as of small objects
 ----- kha:u 31 ʃa:k 33
 white, as of the whitewash of a wall

ʃuŋ 33 *at dawn*
 ----- ʃuŋ 33 ʃe:k 33
 brightening as at dawn
 ----- ʃuŋ 33 ʃa:k 33
 sunlight streaming through the window

<:) occurring with /m/, indicating the [inner
 feeling]

dam 31 *dark*
 ----- dam 31 nje:m 55
 a feeling toward the color of the hair



----- dam 31 nja:m 55

a feeling of being in a dark room

som 325 sour

----- som 325 pje:m 33

less sour

----- som 325 pja:m 33

a sensation of sourness

<:) occurring with /ŋ/, indicating [scope] or
[extent]

suŋ 52 high, tall

----- suŋ 52 kwe:ŋ 33

as of a thin object

----- suŋ 52 kwa:ŋ 33

as of a big object

tsam 213 cool

----- tsam 213 [e:ŋ] 33

a lesser degree of coolness

----- tsam 213 [a:ŋ] 33

a substantial degree of coolness

kot 325 crooked

----- kot 33 ηe:η 55
as of small twigs being curved.

----- kot 325 ηa:η 55
as of crooked branches

ko: 31 *arched*

----- ko: 31 ηe:η 55
less arched as of a smaller object

----- ko: 31 ηa:η 55
more arched as of a bigger object

Type II, with /e:/ in the single occurrence, and only one example with the final /-η/ has been found, the tallied syllable expressing a subtle feeling to a certain extent.

kat 55 *cold*
----- kat 55]e:η 33
perceptibly cold as of water in a pond

Type II, with /a:/ in the single occurrence, and only /-k/ has been found to occur as the final, the tallied syllable expressing an intensified state of sketchy description.

be:u 325 *warped*

----- be:u 325 ŋa:k 55
 very much warped

tsa:i 325 *slant*

----- tsa:i 325 ŋa:k 55
 as of a shelf being slanted toward oneside

ha:ŋ 33 *apart*

----- ha:ŋ 33 nja:k 55
 disarrayed, as of the space
 between rows of seedlings

ke: 55 *dark hue*

----- ke: 55 nja:k 55
 as of color or as of aged complexion

The case of a single /a:/ in /sa:t 33/ reveals the only occurrence of /a:/ with the final /t/. But this tallied syllable occurs so freely with not less than 15 and more headwords, that it should be considered separately.

e.g.

tum	31	sa:t	33	very wet
wa:n	52	sa:t	33	very sweet

It may be a loanword³. In Vietnamese, "rât" [zət] means "very". This may give a hint that some of the tallied syllables, especially those of Type II may have to be deduced if future evidence reveals the origin of the borrower's language.

(2) /m/ occurring with the final /t/

khe:u 31 *stink, bad smell*

----- khe:u 31 fɪt 33

unusually strong smell of stinking things

This is the only example to illustrate this combination. Additional data is needed to make further comment on this group.

The weakening of the phonological constraint between the headwords and the tallied syllables, may integrated opacity and arbitrariness into the system of iconicity⁴ by higher degree on the continuum of transparency between the poles of icon and symbol.

*K. Gregerson first reminded me on the possible origin of this word in 1991, as it might have a link with the Mon-Khmer languages, such as the vietnamese language.

²See Fordyce (1988:Ch.1) for further details in the transparency of words.

4.7 Summary

The special features of those tallied syllables listed in the Secondary System can be generalized into two major items. The first feature reveals that the syllabic structure of the tallied syllable has to be a closed syllable. And the consonant finals of the Secondary System are found to convey subclassifying senses. The iconicity of the tallied syllables are revealed by the inherent values of the iconic vowels and the senses associated with the consonant finals.

The second feature reveals the relative degree of productivity in the Secondary System. A small part of those tallied syllables of Type II in this system are admissible to undergo reduplication, which reveals another framework of iconicity. Though the study of disyllabic formation patterns has been excluded from this thesis, it is necessary to mention this feature which distinguish the Secondary System from the First System. The tallied syllable seems to have the illusive tendency of its becoming a lexical descriptive word in some distant future.

I postulate that those semantic heads with

the non-productive but collocative tallied syllables should be listed in the lexicon as individual lexical units in order to avoid future confusion and disconnected usage of diffusion in the area.