# **Bouyei word formation**

Attasith Boonsawasd<sup>1</sup>

**Abstract:** The Bouyei language is divided into three vernaculars, the southern vernacular, the central vernacular and the southwestern vernacular. This paper aims to describe the lexicology of the southern vernacular of the Bouyei language focusing on word formation process. Bouyei words are formed by affixing, compounding and reduplicating. First, the affixation consists of prefixing and suffixing. Infixing is not found in this language. Second, the compound is divided into the semantic and syntactic compound. Finally, the reduplication is divided into the simple and complex reduplication. The simple reduplication is normally used to emphasize the meaning of the root or to indicate plurality.

**Key words:** Bouyei grammar, Bouyei word formation, Bouyei word structure, Bouyei language, affixation

#### 1. Introduction<sup>2</sup>

Bouyei is an ethnic minority group found mainly in the south, the southwest, and the central parts of Guizhou Province, P. R. China. Some Bouyei are also found in scattered communities throughout Yunnan and Sichuan. In addition, in northern Vietnam, few Bouyei people can be found with a population just short of 50,000. Nowadays, the population of Bouyei is more than 2.5 million. They have their own language which is classified in the northern branch of Tai language family. The closest related languages to Bouyei are the other Northern Tai languages, Northern Zhuang in neighboring Guangxi province, Saek in Thailand and Laos, and Yay in Vietnam. Ramsey (1941) states that Bouyei are not clearly distinguishable from the Northern Zhuang either linguistically or culturally because linguistic differences between Bouyei and Northern Zhuang are slight. Snyder (1995), following Li (1960), places the Bouyei language in the Northern Tai branch of Tai-Kadai as well as Edmondson and Solnit (1997), Thurgood (1988), and Ostapirat (2000). See figure 1:

<sup>&</sup>lt;sup>1</sup> Mahidol University, Thailand; boonsawasd\_78@hotmail.com.

 $<sup>^{2}\,</sup>$  This research was fully supported by the Royal Golden Jubilee Ph.D. Program Scholarship from the Thailand Research Fund.

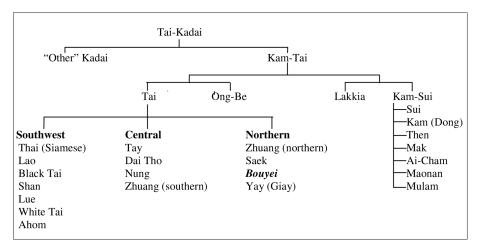


Figure 1: Relationship of Bouyei to other Tai languages (adapted from Snyder 1995: 13)

The Bouyei language, according to Zhou et al. (2001), is divided into three vernaculars as follows:

- 1) Qiannan vernacular (southern part) is spoken in Wangmo, Anlong, Luodian, Zhenfeng, Xingyi, Cheheng, Dushan and Libo and some parts of Huishui, Changshun, Xingren, Ziyun, Guanling, Pingtang, Duyun and Zhenning;
- 2) Qianzhong vernacular (central part) is spoken in Guiyang, Guiding, Qingzhen, Longli, Pingba, Anshun, Zhijin and Qianxi and large parts of such counties as Huishui, Changshun, Duyun and a small part of Dushan County;
- 3) Qianxi vernacular (southwestern part) is spoken in Pu'an, Qinglong, Liuzhi, Puding, Shuicheng, and large parts of Zhenning and Guanling counties and small parts of Ziyun and Xingren counties.

The Wangmo lect of the first vernacular is considered to be the standard language because of a large percentage of speakers. The Bouyei speakers of other lects understand Wangmo, while the speakers of Wangmo lect do not understand the others. The geographical distribution of the vernaculars is shown in Figure 2.

Most of previous research on the Bouyei language relates to phonology and sociolinguistics, such as Variation in Bouyei (Snyder 1995), Survey of the Guizhou Bouyei Language (Wu et al. 2007), Killing a Buffalo for the Ancestors: A Zhuang Cosmological Text from Southwest China (Holm 2003), Bouyei-Chinese-English-Thai Dictionary (Zhou et al. 2001). The research focusing on the morphology of Bouyei is very scarce. Therefore, the researcher would like to fill a gap in the linguistic study of the Bouyei language

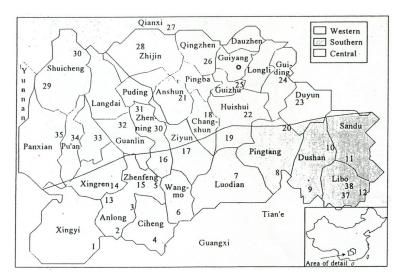


Figure 2: Bouyei areas (Edmondson and Solnit 1997: 28)

by making a pioneering study of Bouyei word formation, using the structuralist approach.

### 2. Scope of the study and methodology

Since variation within the Bouyei language from area to area is minimal and vocabulary and grammatical structure are quite similar everywhere (Zhou et al. 2001), it is not necessary to collect data in every area where Bouyei people live. The researcher decided to analyze the data collected from Zhenfeng and Wangmo counties in Guizhou province, in both isolated sentences and sentences in context. The former was drawn from the Bouyei-Chinese-English-Thai dictionary (Zhou et al. 2001) and the latter was collected from the Bouyei speakers living in Guizhou province by Wang and Zhou (2005).

In addition, a list of 300 words adapted from the Southeast Asia word list of Mahidol University, revised in 1990, expressions used in daily life, and basic phrases and sentences in Bouyei were also elicited from my principal informant, Huang Zhenbang. He is a native Bouyei speaker and was an M. A. student at the Central University for Nationalities (CUN) in Beijing, P. R. China. The informant and the researcher, a Thai native speaker, primarily communicated in English. Sometimes the informant could not adequately convey his intended meaning in English, so alternative methods of communication included the use of an explanatory drawing or translation into Chinese, followed by a translation into English. All data were recorded into a computer program called FieldWorks Language Explorer (FLEx), version 5.0. The

FLEx program proved to be very useful and convenient for arranging data and reducing the time required for arrangement.

### 3. Word formation process

Word formation is defined as "the whole process of morphological variation in the constitution of words" (Crystal 1991: 381). Bouyei words can be morphologically simplex or complex. A simplex word consists of one free morpheme which can stand as an independent word by itself. Some examples of simplex words are presented below:

#### Simplex Nouns

[mit <sup>33</sup> ]	'knife'
[kai <sup>35</sup> ]	'chicken'
[ <sup>?</sup> doŋ <sup>214</sup> ]	'forest'
[?oi <sup>31</sup> ]	'sugarcane'

#### Simplex Verbs

[zan <sup>214</sup> ]	'to see'
[siu <sup>214</sup> ]	'to harvest'
[xaw <sup>51</sup> ]	'to give'
[pai <sup>214</sup> ]	'to go'

#### Simplex Adjectives

[la:u <sup>31</sup> ]	'big'
[k <sup>w</sup> a:i <sup>214</sup> ]	'clever'
[ <sup>3</sup> da:t <sup>35</sup> ]	'hot'
[sa:ŋ <sup>214</sup> ]	'tall'
[fon <sup>31</sup> ]	'black'

A complex word consists of at least two morphemes. The processes of complex word formation can be divided into three major types: affixation, compounding and reduplication.

#### 3.1. Affixation

Affixation is a linguistic process that speakers use to form different words by adding bound morphemes (affixes) at the beginning (prefixation), the middle (infixation) or the end (suffixation) of words. In Bouyei, the numbers of affixes are limited. Some affixes are derived from words. Based on the position of affixes, affixation is divided into prefixing and suffixing. Infixing is not found in the formation of Bouyei words.

#### 3.1.1. Prefixation

A prefix is an affix which is added initially to a root or stem (Crystal 1991). There are a number of prefixes involved in the derivation of Bouyei words. They can be divided into modifying prefixes, nounforming prefixes, adjective-forming prefixes and adverbial-forming prefixes.

### 1) Modifying prefixes

Modifying prefixes modify the meaning of the root. Some commonly-used prefixes are as follows:

### [tuŋ<sup>31</sup>-] 'mutual'

This prefix means 'mutual'. It indicates reciprocal action:

[tuŋ <sup>31</sup> .t͡çai <sup>21</sup> ]	'to love each other'
[tuŋ <sup>31</sup> .ti <sup>21</sup> ]	'to fight each other'
[tuŋ <sup>31</sup> .puŋ <sup>21</sup> ]	'to meet together'
[tuŋ <sup>31</sup> .tan <sup>214</sup> ]	'to curse each other'

## [po<sup>21</sup>-] 'pluralizer'

[po <sup>21</sup> .te <sup>214</sup> ]	'they'
[po <sup>21</sup> .zau <sup>21</sup> ]	'we'
[po <sup>21</sup> .su <sup>214</sup> ]	'you (pl.)'
[po <sup>21</sup> .vun <sup>21</sup> ]	'people'

#### [pau<sup>35</sup>-] 'elderly kinships'

[pau <sup>35</sup> .pi <sup>31</sup> ]	'elder brother'
[pau <sup>35</sup> .tce <sup>35</sup> ]	'old people'
[pau <sup>35</sup> .la:u <sup>31</sup> ]	'eldest brother'
[pau <sup>35</sup> .ya <sup>33</sup> ]	'ancestor'

### 2) Noun-forming prefixes

A noun-forming prefix is placed before verbs to create nominal words. One commonly-used prefix is exemplified below:

#### [ka:i<sup>35</sup>-] 'things'

[ka:i <sup>35</sup> .kwn <sup>214</sup> ]	'things to eat (food)'
[ka:i <sup>35</sup> .tan <sup>51</sup> ]	'things to wear (clothes)'
[ka:i <sup>35</sup> .seu <sup>35</sup> ]	'things to be embroidered (embroidery)'
[ka:i <sup>35</sup> .yuŋ <sup>33</sup> ]	'things to be used (appliance)'

### 3) Adjective-forming prefixes

Adjective-forming prefixes are added in front of verbs, adjectives or numerals to produce adjectival words. Some prefixes that are commonly used are as follows:

## ['di<sup>214</sup>-] 'having a good characteristic'

[²di <sup>214</sup> .tcai <sup>21</sup> ]	'beautiful, lovely'
[ <sup>?</sup> di <sup>214</sup> .nen <sup>33</sup> ]	'beautiful'
[ <sup>?</sup> di <sup>214</sup> .mai <sup>21</sup> ]	'interesting'
[²di <sup>214</sup> .nia <sup>214</sup> ]	'pleasant to hear'

### [ta21-] 'ordinalizer'

[ta <sup>21</sup> .?it <sup>35</sup> ]	'first'
[ta <sup>21</sup> .ŋi <sup>33</sup> ]	'second'
[ta <sup>21</sup> .sa:m <sup>214</sup> ]	'third'
[ta <sup>21</sup> .si <sup>35</sup> ]	'fourth'
[ta <sup>21</sup> .¢ip <sup>33</sup> ]	'tenth'

### 4) Adverbial-forming prefixes

Adverbial-forming prefixes are placed in front of adjectives or adverbs to create adverbial words. Some prefixes that are commonly used are exemplified below:

#### [pa:i<sup>33</sup>-] 'side'

[pa:i <sup>33</sup> .soi <sup>31</sup> ]	'leftside'
[pa:i <sup>33</sup> .kua <sup>21</sup> ]	'rightside'
[pa:i <sup>33</sup> .la <sup>51</sup> ]	'below'
[pa:i <sup>33</sup> .zo <sup>33</sup> ]	'outside'

### [tca:n<sup>214</sup>-] 'middle'

[tça:ŋ <sup>214</sup> .xat <sup>35</sup> ]	'morning'
[tca:ŋ <sup>214</sup> .xam <sup>33</sup> ]	'evening, night'
[tça:ŋ <sup>214</sup> .xum <sup>21</sup> ]	'midnight'
[tca:ŋ <sup>214</sup> .ŋon <sup>21</sup> ]	'daytime'

#### 3.1.2. Suffixation

A suffix is "an affix which is added following a root or stem" (Crystal 1991: 336). The process of suffixation is limited in Bouyei language. One commonly-used suffix found in my data is [-laŋ<sup>214</sup>] 'next'. It is used to indicate time, for example:

[pi <sup>214</sup> .laŋ <sup>214</sup> ]	'next year'
[ŋon <sup>21</sup> .laŋ <sup>214</sup> ]	'next day'
[xat <sup>35</sup> .laŋ <sup>214</sup> ]	'next morning'

### 3.2. Compounding

Compounding is another morphological process for deriving nouns or verbs in Bouyei. A compound is defined as "a linguistic unit which is composed of elements that function independently in other circumstances" (Crystal 1991: 70). Word compounds consist of two or more free morphemes. These morphemes or constituents cannot be separated by any modifier. Bouyei word compounds can be divided into two major types: semantic compounds and syntactic compounds.

### 3.2.1. Semantic compounds

Semantic compounds consist of elements which are semantically related in various ways such as synonymy and antonymy (Burusphat and Qin 2010). They can be divided into two subtypes which include coordinative compounds and modifier compounds.

## 1) Coordinative compounds

A coordinative compound consists of two roots that are identical, interrelated, or opposite in meaning. Some examples are presented below:

### Coordinative compounds having the same / similar meanings

[zi <sup>33</sup> .na <sup>21</sup> ]	[zi <sup>33</sup> ]	$[na^{21}]$
'field'	'farmland'	'paddy field'
[ka:ŋ <sup>51</sup> .xa:u <sup>35</sup> ]	[ka:ŋ <sup>51</sup> ]	[xa:u <sup>35</sup> ]
'to talk'	'to speak'	'to talk'
[ko <sup>214</sup> .fai <sup>31</sup> ]	[ko <sup>214</sup> ]	[fai <sup>31</sup> ]
'tree'	'tree'	'tree'
[nen <sup>33</sup> .zan <sup>214</sup> ]	[nen <sup>33</sup> ]	[zan <sup>214</sup> ]
'to look'	'to look'	'to see'

### Coordinative compounds having interrelated meanings

[tçim <sup>214</sup> .ŋan <sup>21</sup> ]	[tçim <sup>214</sup> ]	[ŋan <sup>21</sup> ]
'property'	'gold'	'silver'
[ta <sup>33</sup> .xa:i <sup>51</sup> ]	[ta <sup>33</sup> ]	[xa:i <sup>51</sup> ]
'milky way'	'river'	'sea'
[me <sup>33</sup> .ta:i <sup>35</sup> ]	[me <sup>33</sup> ]	[ta:i <sup>35</sup> ]
'mother-in-law'	'mother'	'grandmother'
[taŋ <sup>214</sup> .ŋon <sup>21</sup> ]	[taŋ <sup>214</sup> ]	[ŋon <sup>21</sup> ]

'sun'	ʻlight'	'daytime'
$[tua^{21}.p^ya^{214}]$	[tua <sup>21</sup> ]	$[p^y a^{214}]$
'fish'	'class term (animal)'	'fish'
[ma <sup>35</sup> . <sup>2</sup> dai <sup>214</sup> ]	$[ma^{35}]$	[ <sup>9</sup> dai <sup>214</sup> ]
'persimmon'	'class term (fruit)'	'persimmon'
[ <sup>?</sup> dan <sup>214</sup> .tom <sup>35</sup> ]	[ <sup>?</sup> dan <sup>214</sup> ]	[tom <sup>35</sup> ]
'basket'	'class term (object)'	'basket'
[fa <sup>33</sup> .mit <sup>33</sup> ]	[fa <sup>33</sup> ]	[mit <sup>33</sup> ]
'knife'	'class term (sharp weapon)'	'knife'

## Coordinative compounds having opposite meanings

[po <sup>33</sup> .me <sup>33</sup> ]	[po <sup>33</sup> ]	[me <sup>33</sup> ]
'parents'	'father'	'mother'
[k <sup>w</sup> a:n <sup>214</sup> .pa <sup>21</sup> ]	[k <sup>w</sup> a:n <sup>214</sup> ]	[pa <sup>21</sup> ]
'spouse'	'husband'	'wife'
[pi <sup>31</sup> .nuaŋ <sup>31</sup> ]	[pi <sup>31</sup> ]	[nuaŋ <sup>31</sup> ]
'sibling'	'elder brother'	'younger brother'
[ta:i <sup>214</sup> .tçau <sup>214</sup> ]	[ta:i <sup>214</sup> ]	[tçau <sup>214</sup> ]
'life or death, fate'	'to die'	'living, alive'

It should be noted that, in the last four examples of coordinative compounds having interrelated meanings, the semantic relation in each pair of morphemes, such as [ma³5.²dai²¹⁴] 'persimmon' and [fa³³.mit³³] 'knife,' is a shape-object relation (Singnoy 2006: 66). Class terms occurring in the first position of compounds are considered as the shape of the object. Even though they seem like classifiers, class terms and classifiers are different. According to DeLancey (1986: 441), class terms and classifiers differ in the way that "class terms occur with their classified nouns in lexicalized compounds, while classifiers occur with their classified terms in nonce syntactic constructions". Therefore, class terms and classifiers can be identified with the following structures:

Noun compound: Class term + Noun
Noun phrase: Num + Classifier + Noun

In the following example:

 $[{f tua^{21}}.moi^{214} \ fon^{31} \ tuk^{33} \ son^{214} \ {f tua^{21}} \ kuk^{35} \ xap^{33} \ ta:i^{214} \ pai^{33}]$  bear black to suffer two cls. tiger to bite to die already 'The black bear was bitten to death by two tigers.'

[tua $^{21}$ ] in [tua $^{21}$ .moi $^{214}$ ] 'bear' is identified as a class term, while [tua $^{21}$ ] in [soŋ $^{214}$  tua $^{21}$  kuk $^{35}$ ] 'two tigers' is identified as a classifier. Their structures are as follows:

[tua <sup>21</sup>		moi <sup>214</sup> ]	'bear'	(Noun compound)
Class te	erm	Noun		
[soŋ <sup>214</sup>	$tua^{21}$	kuk <sup>35</sup> ]	'two tigers'	(Noun phrase)
Num.	cls.	Noun		

### 2) Modifier compounds

A modifier compound consists of two morphemes. The first morpheme functions as the head of the compound. Another morpheme functions as the modifier which specifies the head. Examples of modifier compounds are as follows:

Bouyei word	Head	Modifier
[ka <sup>214</sup> .la:u <sup>31</sup> ]	[ka <sup>214</sup> ]	[la:u <sup>31</sup> ]
'thigh'	ʻlegʻ	'big'
[me <sup>33</sup> .va:i <sup>21</sup> ]	[me <sup>33</sup> ]	[va:i <sup>21</sup> ]
'cow'	'mother'	'buffalo'
[xa:p <sup>33</sup> .fai <sup>31</sup> ]	[xa:p <sup>33</sup> ]	[fai <sup>31</sup> ]
'coffin'	'box'	'tree'
[naŋ <sup>214</sup> .fai <sup>31</sup> ]	[naŋ <sup>214</sup> ]	[fai <sup>31</sup> ]
'bark'	'skin'	'tree'
[zeu <sup>214</sup> .la:u <sup>31</sup> ]	[zeu <sup>214</sup> ]	[la:u <sup>31</sup> ]
'to laugh'	'to laugh'	'big'
[zeu <sup>214</sup> .ni <sup>35</sup> ]	[zeu <sup>214</sup> ]	[ni <sup>35</sup> ]
'to smile'	'to laugh'	'small'

#### 3.2.2. Syntactic compounds

According to Burusphat and Qin (2012), a syntactic compound is distinguished from a semantic compound by having the same structure as a sentence. Syntactic compounds in Bouyei can be classified into two subtypes: subject-predicate compounds and verbobject compounds.

#### 1) Subject-Predicate compounds

A subject-predicate compound consists of two roots that function respectively as subject and predicate. Some examples of subject-predicate compounds are presented below:

Bouyei word	Subject	Predicate
[mok <sup>33</sup> .xom <sup>35</sup> ]	[mok <sup>33</sup> ]	[xom <sup>35</sup> ]
'blanket'	'blanket'	'to cover'
[sam <sup>214</sup> .na:p <sup>35</sup> ]	[sam <sup>214</sup> ]	[ɲa:p <sup>35</sup> ]
'angry'	'mind'	'trouble'

[ <sup>?</sup> da:ŋ <sup>214</sup> .ta:i <sup>214</sup> ]	[²da:ŋ²¹⁴]	[ta:i <sup>214</sup> ]
'dead body'	'body'	'to die'
[pu <sup>31</sup> .ka <sup>31</sup> ]	[pu <sup>31</sup> ]	[ka <sup>31</sup> ]
'businessman'	'class term (people)'	'to trade'
[tua <sup>21</sup> . <sup>?</sup> bin <sup>214</sup> ]	[tua <sup>21</sup> ]	[ <sup>9</sup> bin <sup>214</sup> ]
'fly'	'class term (animal)'	'to fly'

### 2) <u>Verb-Object compounds</u>

A verb-object compound consists of two morphemes. The first morpheme is a verb which indicates an action. The other one functions as an object of the verb. Verb-object compounds are exemplified below:

Bouyei word	Verb	Object
[ça:u <sup>31</sup> .za:n <sup>21</sup> ]	[ça:u <sup>31</sup> ]	[za:n <sup>21</sup> ]
'to get married'	'to begin'	'house'
[ <sup>?</sup> dam <sup>214</sup> .na <sup>21</sup> ]	[ <sup>2</sup> dam <sup>214</sup> ]	[na <sup>21</sup> ]
'to transplant rice seedling'	'to transplant'	'paddy field'
$[tok^{35}.\widehat{t}ca^{51}]$	[tok <sup>35</sup> ]	[tça <sup>51</sup> ]
'to sow'	'to scatter'	'rice seedling'
[nw <sup>51</sup> .¢w <sup>214</sup> ]	[nw <sup>51</sup> ]	[¢w <sup>214</sup> ]
'to breathe in'	'to suck'	ʻair'
[çuaŋ <sup>35</sup> .çш <sup>214</sup> ]	[çuaŋ <sup>35</sup> ]	[¢w <sup>214</sup> ]
'to breathe out'	'to release'	'air'

#### 3.3. Reduplication

Reduplication is a morphological process of repetition of the root which is used to modify or emphasize the basic meaning of the root. Reduplication in Bouyei can be divided into simple reduplication and complex reduplication.

### 3.3.1. Simple reduplication

Simple reduplication emphasizes the meaning of the root or indicates plurality. Reduplicated words include nouns, verbs, adjectives and adverbs.

#### 1) Emphasis

The reduplication of verbs, adjectives and adverbs usually emphasizes the meaning of the root. Some examples are:

[?a:ŋ <sup>35</sup> .?a:ŋ <sup>35</sup> ]	'very happy'
[?im <sup>35</sup> .?im <sup>35</sup> ]	'very full'

[tçai <sup>214</sup> .tçai <sup>214</sup> ]	'very far'
[lok <sup>33</sup> .lok <sup>33</sup> ]	'dark green'
[na:i <sup>33</sup> .na:i <sup>33</sup> ]	'very slowly'
$[sa:n^{214}.sa:n^{214}]$	'very high'
[ya:ŋ <sup>33</sup> .ya:ŋ <sup>33</sup> ]	'very happy'

Besides, the reduplicative compound of modifiers also heightens the degree of intensity of the quality expressed by the adjective root, for example:

Bouyei word	Adjective root	Modifier	Reduplicant
[?au <sup>31</sup> zum <sup>33</sup> .zum <sup>33</sup> ]	[?au <sup>31</sup> ]	[zum <sup>33</sup> ]	[zum <sup>33</sup> ]
'very wet' [xa:u <sup>214</sup> po <sup>35</sup> .po <sup>35</sup> ]	'wet' [xa:u <sup>214</sup> ]	[po <sup>35</sup> ]	[po <sup>35</sup> ]
'very white'	'white'	tr - 1	tr - 1
[la:u <sup>31</sup> ?u <sup>31</sup> .?u <sup>31</sup> ]	[la:u <sup>31</sup> ]	$[?u^{31}]$	[?u <sup>31</sup> ]
'very big'	'big'		

### 2) Plurality

The simple reduplication of nouns and adverbs can indicate plurality as shown below.

[pi <sup>214</sup> .pi <sup>214</sup> ]	'every year'
[xam <sup>33</sup> .xam <sup>33</sup> ]	'every night'
[ŋon <sup>21</sup> .ŋon <sup>21</sup> ]	'every day'
$[za:n^{21}.za:n^{21}]$	'every family'
[ya:ŋ <sup>21</sup> .ya:ŋ <sup>21</sup> ]	'everything'

However, there is one reduplicated word found in my data indicating onomatopoeia.  $[fu^{21}.fu^{21}]$  in  $[^7bin^{214}\ fu^{21}.fu^{21}]$  'to fly' is onomatopoeic of the wind.

### 3.3.2. Complex reduplication

The pattern of complex reduplication in Bouyei is ABAC where A is a simple reduplicated word, while B and C are separated coordinative semantic compounds, for example:

	A	В	A	С
[kua <sup>33</sup> .zi <sup>33</sup> .kua <sup>33</sup> .na <sup>21</sup> ]	[kua <sup>33</sup> ]	$[zi^{33}]$	[kua <sup>33</sup> ]	[na <sup>21</sup> ]
'to work in the field'	'to do'	'farmland'	'to do'	'paddy field'
[kua <sup>33</sup> .xoŋ <sup>214</sup> .kua <sup>33</sup> .meu <sup>21</sup> ]	[kua <sup>33</sup> ]	$[xon^{214}]$	[kua <sup>33</sup> ]	[meu <sup>21</sup> ]
'to cultivate'	'to do'	'work'	'to do'	'crop'

$[tuŋ^{31}.lum^{51}.tuŋ^{31}.sa:u^{33}]$	[tuŋ³¹]	[lum <sup>51</sup> ]	[tuŋ <sup>31</sup> ]	[sa:u <sup>33</sup> ]
'to be equal'	'each other'	'same'	'each other'	'same'
[pan <sup>21</sup> .cian <sup>214</sup> .pan <sup>21</sup> .fa:n <sup>33</sup> ]	[pan <sup>21</sup> ]	[¢ian <sup>214</sup> ]	[pan <sup>21</sup> ]	[fa:n <sup>33</sup> ]
'to be rich'	'to be'	'thousand'	'to be'	'ten thousand'
['da:ŋ <sup>214</sup> .'deu <sup>214</sup> .'da:ŋ <sup>214</sup> .to <sup>33</sup> ]	[²da:ŋ <sup>214</sup> ]	[ <sup>9</sup> deu <sup>214</sup> ]	[ <sup>?</sup> da:ŋ <sup>214</sup> ]	[to <sup>33</sup> ]
'to live alone'	'body'	'one'	'body'	'single'
[mi <sup>21</sup> .taŋ <sup>31</sup> .mi <sup>21</sup> .tuan <sup>33</sup> ]	$[mi^{21}]$	[taŋ <sup>31</sup> ]	[mi <sup>21</sup> ]	[tuan <sup>33</sup> ]
'never stop'	'neg.'	'to stop'	'neg.'	'to finish'

#### 4. Conclusion and discussion

In this study, Bouyei word formation process has been analyzed. The results reveal that Bouyei complex words are formed by affixing, compounding and reduplicating. The affixation consists of prefixing and suffixing. Infixing is not found in this language. The compounds are divided into semantic and syntactic compounds. The class term is differentiated from the classifier to form the word compound. Reduplications are divided into simple and complex reduplications. Simple reduplication is normally used to emphasize the meaning of the root or to indicate plurality.

It is noted that some monosyllabic nouns in Bouyei can be reduplicated to express the meaning of "every" as well as in Chinese. Some examples are:

Bouyei	Chinese	Meaning
[pu <sup>31</sup> .pu <sup>31</sup> ] [ŋon <sup>21</sup> .ŋon <sup>21</sup> ]	gè gè (个个) tiān tiān (天天)	'every one' 'every day'
$[za:n^{21}.za:n^{21}]$	jiā jiā (家家)	'every family'

Even though this characteristic is normally found in Tai languages, the meaning of these reduplicated words in Bouyei slightly differs from the meaning they have in other Tai languages. For example, [wan³³ wan³³] in Thai language means "each day" whereas [ŋon²¹.ŋon²¹] in Bouyei means "every day". Therefore, this pattern may be borrowed from Chinese as a result of language contact.

#### References

Burusphat, S. (2002), "The Pragmatic Word Ordering in Bouyei", in Macken, M. A. (ed.), Papers from the Tenth Annual Meeting of the Southeast Asian Linguistics Society 2000, Arizona State University, Program for Southeast Asian Studies, Monograph Series Press, p. 367-390.

- Burusphat, S. and Qin, X. (2012), "Zhuang Word Structure", *Journal of Chinese Linguistics*, vol. 40, no. 1, Chinese University Press, p. 56-83.
- Chamberlain, J. R. (1975), "A New Look at the History and Classification of the Tai Dialects", in Harris, J. G. and Chamberlain, J. R. (eds.), Studies in Tai Linguistics in Honor of William J. Gedney, Central Institute of English Language, Office of State Universities, Bangkok, p. 49-60.
- Crystal, D. (1991), A Dictionary of Linguistics and Phonetics, Blackwell, Oxford.
- DeLancey, S. (1986). «Toward a History of Tai Classifier Systems», in Craig, C. G. (ed.), Noun Classes and Categorization, John Benjamins, Amsterdam Philadelphia p. 437-451.
- Diller, A., Edmondson, J. A. and Yongxian, L. (2008), *The Tai-Kadai Languages*, Routledge, New York.
- Edmondson, J. A. and Solnit, D. B. (1997), *Comparative Kadai: the Tai Branch*, Summer Institute of Linguistics and the University of Texas at Arlington, Dallas.
- Hayes, B. (2009), Introductory Phonology, Wiley-Blackwell, Chichester UK.
- Holm, D. (2003), Killing a Buffalo for the Ancestors: a Zhuang Cosmological Text from Southwest China, Northern Illinois University Press.
- Iwasaki, S. and Ingkaphirom, P. (2005), A Reference Grammar of Thai, Cambridge University Press, Cambridge.
- Li, F. K. (1960), "A Tentative Classification of Tai Dialects", in Diamond, S. (ed.), Culture in History: Essays in Honor of Paul Radin, Columbia University Press, New York, p. 951-959.
- Ostapirat, W. (2000), "Proto-Kra", *Linguistics of the Tibeto-Burman Area*, vol. 23, no. 1, p. 1-251.
- Ramsey, S. R. (1941), *The Languages of China*, Princeton University Press, Princeton, N.J.
- Singnoy, A. (2006), *Compound Noun*, Chulalongkorn University Press, Bangkok.
- Snyder, D. M. (1995), *Variation in Bouyei*, M. A. Thesis in Linguistics, Faculty of the Graduate School, The University of Texas at Arlington.
- Snyder, D. M. (2000), "Folk Wisdom in Bouyei Proverbs and Songs", in Proceedings of the International Conference on Tai Studies, July 29-31, Mahidol University, Bangkok, p. 61-87.
- Thurgood, G. (1988), "Notes on the Reconstruction of Kam-Sui", in Solnit, D. B. and Edmondson J. A. (eds.), Comparative Kadai: Linguistics Studies beyond Tai (Revised Edition), Summer Institute of Linguistics and the University of Texas at Arlington, Dallas, p. 179-218.
- Wang, W. (1997), "The Sound System of the Bouyei Language and Its Special Features", in Solnit, D. B. and Edmondson J. A. (eds.), Comparative Kadai: The Tai Branch, Summer Institute of Linguistics and the University of Texas at Arlington, Dallas, p. 147-60.
- Wang, W. and Zhou, G. (2005), *Buyiyu Jichu Jiaocheng*, Kam-Tai Institute, Central University for Nationalities Press, Beijing.
- Wei, X. (1989), Guizhou Buyizu Minjian Gushi Xuan (Selected Bouyei Folktales from Guizhou), Zhongguo Minjian Wenyi Chubanshe, Guiyang.
- Wu, W., Snyder, W. C. and Liang, Y. (2007), Survey of the Guizhou Bouyei Language, SIL Language and Culture Documentation and Description 2007-001, SIL International, Dallas.

Zhang, G. (1998), "The Status of Research on Kam-Tai Studies by Chinese Scholars", in Burusphat, S. (ed.), *The International Conference on Tai Studies*, Institute of Language and Culture for Rural Development, Mahidol University, p. 435-442.

- Zhang, Y. and Fang, Y. (2005), *Selected Pictures of Chinese Ethnic Groups*, State Nationalities Affairs Commission, China Pictorial Publishing House.
- Zhou, G., Ratanakul S., Burusphat S., and Suraratdecha S. (2001), *Bouyei-Chinese-English-Thai Dictionary*, Ekphimthai Ltd., Bangkok.