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## Words for 'one' in Báimă<sup>\*</sup>

## Katia CHIRKOVA

This article describes different words for 'one' in Báimă, a language spoken at the border of Sichuān and Gānsù provinces in China. According to Sūn Hóngkāi, the profusion of words for 'one' in Báimă is one of the features that distinguish Báimă from Tibetan. This paper discusses the distribution of various words for 'one' in a corpus of Báimă stories collected during a fieldwork in 2003, and comments on their meanings and functions, on restrictions of their co-occurrence, and on their interchangeability and etymology. Contrary to Sūn's conclusion, it is argued that all forms are cognate with Tibetan.

*Key words* : Báimă, numeral 'one', indefinite marker, Classical Tibetan, Tibetan dialects, etymology.

Cet article décrit des mots differents signifiant 'un' en báimă, langue parlée à la frontière du Sichuān et Gānsù en Chine. D'après Sūn Hóngkāi, la profusion des mots pour 'un' est l'une des caractéristiques qui distinguent le báimă des dialectes du tibétain. Cet article examine la distribution des mots pour 'un' dans un corpus de légendes báimă recueilli sur le terrain. Sont ici exposées les principales valeurs sémantiques ainsi que les emplois des mots pour 'un'. Sont aussi exprimées des remarques sur leur interchangeabilité et leur étymologie. Contrairement à la conclusion de Sūn, il est ici montré que tous ces mots sont apparentés au tibétain.

<sup>&</sup>lt;sup>\*</sup>In preparation of this article, I have profited from the kind assistance of Kalsang Norbu Gurung and Tharphen Lingtsang who provided me with data from modern varieties of Tibetan and of Paul van Els and Jeroen Wiedenhof who commented on earlier drafts of the manuscript. I would also like to thank the anonymous CLAO reviewer for valuable comments and suggestions. Research for this article was supported by the Spinoza Project of Professor Frederik Kortlandt, Leiden University.

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*Mots-clés* : Báimă, chiffre 'un', article indéfini, tibétain classique, dialectes tibétains, étymologie.

### 1. INTRODUCTION: PREVIOUS STUDIES ON BÁIMĂ

Báimǎ 白马 is a Tibeto-Burman language, spoken by approximately 10.000 residents of three counties in Sìchuān 四川 Province and one county in Gānsù 甘肃 Province in the People's Republic of China (PRC). The Báimǎ people (autonym [pe<sup>53</sup>], Dwags-po in Tibetan) reside in mountainous areas (900 to 4.800 m. above sea level) at the borders of four counties (Jiǔzhàigōu 九寨沟, Sōngpān 松潘 (Zung-chu) and Píngwǔ 平武 in Sìchuān and Wénxiàn 文县 in Gānsù) in the immediate proximity of Qiāng 羌 (to their south-west), Chinese (east and south) and Tibetan ethnic groups (west and north).

The status of the Báimă language as either a separate language or a dialect of Tibetan is currently under dispute, partly due to a controversy surrounding the ethnic classification of the Báimă people. The Báimă were classified as Tibetans in the course of the PRC's State Ethnic Classification Project in 1951. They questioned this conclusion on numerous occasions in the 1960s and 1970s. Pointing out that they are different from grassland Tibetans in lifestyle, religion and folklore, the Báimă have repeatedly demanded reclassification. This appeal was granted in the late 1970s, when a group of PRC researchers conducted two surveys in the Báimă areas. As a result of these surveys of 12 (1978) and 25 (1979) days, the research group published two collections of papers (Sìchuān Shěng Mínzú Yánjiūsuǒ 1980, Zēng et al. 1987), in which the majority of researchers argued that the Báimă were descendents of the ancient Dī 氏 tribe (probably related to the Qiāng), which set up influential kingdoms in the 3rd through the 6th centuries CE in the areas currently inhabited by the Báimă.1 At the beginning of the

<sup>&</sup>lt;sup>1</sup> Dictionaries of Chinese usage (e.g. Yáo 2000: 123, 124) list the character  $\mathbb{K}$  with two readings,  $d\bar{i}$  and  $d\bar{i}$ . The former is the name of an ancient ethnic minority; the

Tibetan Yarlung dynasty (7th century), Dī territory was occupied by the Tibetans, with the exception of present-day Píngwǔ County, which is therefore believed to have preserved a relatively unmixed form of the language originally spoken by the Dī.

Despite the conclusion that the Báimă people constitute a distinct ethnic group rather than a branch of Tibetans, they were never officially reclassified. Reclassification of ethnic groups listed as Tibetans remains a sensitive issue in the PRC and is considered by many Tibetans as an attack by the Chinese government on the Tibetan identity (for a discussion see Upton 2000: 3-6). Overshadowed by such political argumentation, the Báimă language remains poorly documented and described.<sup>2</sup> The following scholars have conducted Báimă research.

Sūn Hóngkāi participated in the aforementioned surveys of the Báimă areas in the late 1970s. He wrote a sketch of Báimă phonology and grammar (Nishida and Sūn 1990: 109-168, 209-275; Sūn 1980: 15-25) and collected over 3.000 common vocabulary items (Nishida and Sūn 1990: 321-372). Based on these, Sūn argues that although Báimă has features similar to Tibetan, the differences between Báimă and Tibetan far exceed those between the three main Tibetan dialects spoken in the PRC. Therefore, Báimă should be considered an independent language, distinct from Tibetan but nonetheless part of the Tibetan branch of the Tibeto-Burman language family (cf. Sūn's diagram for Tibeto-Burman in 1983: 100; see also Sūn 2003a, 2003b).

latter means 'foundation'. In spoken language, however, the latter form appears to have taken over the former, so that the name of the ethnic minority is nowadays typically pronounced  $d\tilde{i}$ . For example, at conferences on minority languages in Mainland China 'Di and Qiang' (ancient nomadic tribes in the western regions of China) are consistently named Dǐ Qiāng. In this article, I follow the prescriptive usage and give the name of the ethnic minority as Dī.

<sup>&</sup>lt;sup>2</sup> For an overview of Báimă studies, see Huáng and Zhāng (1995: 79-81) and Sūn (2003a: 65-66, 2003b: 62-64).

Working in collaboration with Sūn Hóngkāi in the late 1980s, Nishida Tatsuo studied records of what is currently named the Báimǎ language in the Xīfān yìyǔ 西番译语 [Vocabularies of Western Barbarian languages], made by Chinese officials during the Qiánlóng reign 乾隆 (1736-1796) of the Qīng dynasty. The results of their collaborative efforts were published in 1990 under the title *Hakuba yakugo no kenkyū: Hakuba no kōzō to keitō* [A study of the Báimǎ-Chinese vocabulary 'Báimǎ yìyǔ': the structure and affiliation of the Báimǎ language]. Nishida agrees with Sūn that Báimǎ should be considered an independent language and he likewise places it in the Tibetan branch.

Āwāng Cuòchéng and Wáng Jiànmín made a survey of 15 days in Píngwǔ County in 1988 and subsequently published a fieldwork report in which they label Báimǎ a dialect of Tibetan. They base this conclusion mainly on a vocabulary of 1000 words, only 150 of which have been published.

Based on language data collected by Sūn Hóngkāi (1990), Zhāng Jìchuān (1994a, 1994b, 1997) wrote three articles on Báimă, outlining regular correspondences between the phonological systems of Báimă and Classical Tibetan. He suggests that Báimă is related to the Khams Tibetan dialect group.

After one month of recording Báimă in Píngwů County in 1995, Huáng Bùfán and Zhāng Mínghuì published an article in which they also propose a set of sound correspondences between Classical Tibetan and Báimă. They thus support Zhāng Jìchuān's hypothesis that Báimă should be classified within the Khams dialect group.<sup>3</sup>

Currently, a vast scholarly majority regards Báimă, in Jackson Sun's (2003: 788 n. 29) words, as "merely an aberrant Tibetan dialect", while Sūn Hóngkāi still maintains that it should be seen as an independent language.

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<sup>&</sup>lt;sup>3</sup> For a critique of Huáng Bùfán and Zhāng Mínghui's (1995) and Zhāng Jìchuān's (1994, 1997) analyses, see Sūn Hóngkāi (2003a: 73-74, 2003b: 77-79).

On the whole, Báimă lexicon looks predominantly Tibetan, with some unusual developments and an admixture of words of unknown origin. Estimations of the percentage of this admixture vary. It is believed to be as high as 72% (out of 2000 basic words) by Sūn (1990: 45) and as low as 13% (out of over 3000 lexical items) by Zhāng (1994a: 114, with the reservation that there is another 25% of bisyllabic words, some syllables of which cannot be traced back to Tibetan) or 13.2% by Huáng and Zhāng (1995: 116). To my knowledge, no careful investigation into possible cognate relationships of these words with languages historically or presently surrounding Báimă has so far been made. Báimă grammar likewise exhibits some features dissimilar to Tibetan dialects (for an overview, see Huáng and Zhāng 1995: 112-115).

The question of the position of Báimă within Tibetan remains at this moment unanswered and more research is required before any definitive conclusions regarding the genetic affiliation of Báimă can be made.<sup>4</sup>

This article is based on my fieldwork with Báimă in October-December 2003. It addresses one of many issues still awaiting scholarly attention, i.e. the question why Báimă has so many words for 'one', as posed by Sūn (1990, 2003a, 2003b).

#### 2. SIX WORDS FOR 'ONE'

Sūn Hóngkāi (Nishida and Sūn 1990: 216) notes that Báimă has several words denoting the meaning 'one'. Three words for 'one'

<sup>&</sup>lt;sup>4</sup> As shown by Jackson Sun (2003a, 2003b), many Tibetan dialects (such as Zhongu and Chos-rje) spoken in northern Sichuan, a borderland between Tibetan and Qiāng, display, similar to Báimă, idiosyncratic phonological innovations and esoteric vocabulary. The position of these dialects within Tibetan remains likewise to be ascertained.

are already attested in the *Yiyū*:  $[tf_{1}^{53}]$  'one',  $[tf_{0}^{13}te^{35}]^5$  'one' and  $[(dz\alpha)f_{0}^{35}]$  'one (pound)'. <sup>6</sup> While  $[tf_{1}^{53}]$  and  $[(dz\alpha)f_{0}^{35}]$  are translated in Chinese as  $y\bar{i}$  'one',  $[tf_{0}^{13}te^{35}]$  is rendered as a combination of the numeral 'one' followed by the measure word for horses and cloth:  $-\mathcal{IE} yi pi$ . In addition to these three words, Sūn mentions three more words for 'one':  $[ko^{53}], [f_{1}^{13}]$  and  $[g_{1}^{53}].^7$  As Sūn points out (2003b: 68-69):

In Baima, there are many different words for the numeral 'one' which can combine with classifiers. The only one which is cognate with Tibetan is  $[tf_1^{53}]$ , while the others include  $[f_1^{13}]$ ,  $[ko^{53}]$  and  $[tf_0^{13}te^{35}]$ . [...] Currently, it is not clearly understood why there are so many different words for 'one' in Baima, nor is it clear why only certain

<sup>&</sup>lt;sup>5</sup> I transcribe this word as  $[tfu^{13}t\epsilon^{35}]$ . Hereafter I will use the form  $[tfo^{13}t\epsilon^{35}]$  when quoting Sūn and  $[tfu^{13}t\epsilon^{35}]$  when referring to my own transcriptions.

<sup>&</sup>lt;sup>6</sup> Báimă has four tones: low rising [13], high rising [35], high falling [53], and rising-falling [341]. The original tone of a monosyllabic word is subject to change to the low rising tone, when followed by the high rising or the high falling tone. Function words (particles, prepositions, conjunctions, modal and auxiliary verbs, etc.) follow the same sandhi rule. For instance, the coordinate conjunction [ $ze^{53}$ ] 'and' changes its original tone to the low rising when followed by a word in a high rising or high falling tone, as in example (3).

<sup>&</sup>lt;sup>7</sup> Sūn Hóngkāi's transcriptions oppose palato-alveolars [ $\int z$ ] and alveolo-palatals [ $\varphi z$ ], which contrast has been argued by Hall (1997a, 1997b) to be unattested in natural languages. Sūn's opposition between palato-alveolars [ $\int z$ ] and alveolo-palatals [ $\varphi z$ ] is described in Huáng and Zhāng (1995) as that between retroflexes [ $\varphi z$ ] and alveolo-palatals [ $\varphi z$ ], which analysis is adopted for my own transcriptions. To facilitate the present exposition which makes use of both Zhāng Jichuān's (1994a, 1997, based on Sūn's transcriptions) and Huáng and Zhāng's (1995) systems of sound correspondences, I preserve original transcriptions in quotations and follow Huáng and Zhāng's analysis in my transcriptions. Thus, the words for 'one' (here without tone marks) [ $\int 1$ ] and [ $z_1$ ] in Sūn Hóngkāi's (1990, 2003a, 2003b) and Zhāng Jichuān (1994a, 1994b, 1997) correspond to Huáng and Zhāng's (1995) [ $\varphi$ ] and [ $z_{\varphi}$ ] respectively. I am grateful to the anonymous *CLAO* reviewer for pointing out the problem with the palato-alveolar and alveolo-palatal opposition.

classifiers may combine with  $[t_{J1}^{53}]$ , and why others can only be used with  $[J_{1}^{13}]$ ,  $[ko^{53}]$  or  $[t_{J0}^{13}te^{35}]$ . Among these classifiers, some may combine with different forms of 'one', but this kind of interchangeability is not always possible.

Sūn elicited these different words for 'one' by translating combinations of the numeral 'one' followed by a classifier from Chinese to Báimă. The frequency of these words in Sūn's data varies considerably:

'One'	Frequency
t∫1 <sup>53</sup>	13
$\int 1^{13}$	12
t∫o¹³te³5	23
ko <sup>53</sup>	26
hɔ <sup>35</sup>	2
<b>31</b> <sup>53</sup>	7

Table 1 - Frequency of words for 'one' in Nishida and Sūn (1990: 357-359)

As appears from this table,  $[t_1 t_1^{53}]$  and  $[\int t_1^{13}]$ , on the one hand, and  $[t_1 f_1^{13} t_1^{25}]$  and  $[ko^{53}]$ , on the other, appear frequently and are distributed evenly, whereas  $[f_1 t_2^{35}]$  and  $[t_1 t_1^{13}]$  are less common.  $[ko^{53}]$  is the most frequent item on the list.

Moreover, according to the list of numerals and classifiers in Nishida and Sūn (1990: 357-359), only [tʃ1<sup>53</sup>], [ʃ1<sup>13</sup>] and [tʃ0<sup>13</sup>te<sup>35</sup>] seem to allow some degree of interchangeability. In two instances, [tʃ1<sup>53</sup>] is reportedly interchangeable with [ʃ1<sup>13</sup>], e.g. 一匹 (布) 'one bolt (of cloth)' can be rendered as either [re<sup>13</sup>zy<sup>341</sup>tʃ1<sup>53</sup>] or [re<sup>13</sup>zy<sup>341</sup>f1<sup>13</sup>] (p. 357). And in one instance, [tʃ1<sup>53</sup>] is interchangeable with [tʃ0<sup>13</sup>te<sup>35</sup>]: 一股 (份) 'one share' can be translated into Báimă as either [kiɛ<sup>35</sup> tʃ1<sup>53</sup>] or [kiɛ<sup>35</sup> tʃ0<sup>13</sup>te<sup>35</sup>] (*ibid*.). The word [ʃ1<sup>13</sup>] is interchangeable with [tʃ0<sup>13</sup>te<sup>35</sup>] in three instances,

e.g. 一盒 'one box'  $[i^{13}xo^{53} \int i^{13}]$  can also be rendered as  $[i^{13}xo^{53} t \int o^{13}te^{35}]$  (p. 357).

In sharp contrast to Sūn's findings, my elicitations from Chinese demonstrate a distinct preference for [ $s a^{13}$ ] (or [ $\int I^{13}$ ] in Sūn's transcription), and my language consultants report it to be freely interchangeable with [ $t \int u^{13} t \epsilon^{35}$ ]. For instance, 一条狗 'one dog' was translated by my language consultants as [ $t c^{h} i^{53} s a^{13}$ ] or [ $t c^{h} i^{53} t \int u^{13} t \epsilon^{35}$ ]. Sūn lists this word only with [ $t \int o^{13} t e^{35}$ ] (p. 358). In other words, my elicitations lead to different frequencies and different degrees of interchangeability, see Table 2 further on.

Direct elicitation of expressions taken out of context cannot clarify potential differences of various lexical items for 'one'. Moreover, the contact language, Chinese, complicates the issue, as the distinction between the stressed numeral yi ge 'one' and its weakened counterpart yi ge (denoting indefinite reference; close in meaning and function to the English indefinite article a) is not always obvious to non-native speakers, because written Chinese does not distinguish between these two usages.<sup>8</sup> Hence, for speakers of a language with a special device to indicate indefinite reference, as is the case with Báimă, Chinese expressions containing the numeral 'one' can potentially be translated in their native language either with the corresponding word for 'one' or with the indefinite article.

In order to understand the differences between various words for 'one', I analyzed their distribution in a corpus of texts collected during my three months of fieldwork in 2003 in the Báimă Tibetan Township, Píngwǔ County, Sìchuān Province. The corpus consists of 31 Báimă legends and stories about Koshino village (Shuǐniújiā 水牛家 in Chinese), once a large and influential Báimă community. Sadly enough, Koshino no longer exists. Its population was relocated to other villages of the Báimă Tibetan Township in

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<sup>&</sup>lt;sup>8</sup> On the semantic distinction between yi ge and its weakened counterpart yi ge, see Chao (1968: 567).

2003. The former location of Koshino will be flooded in the course of 2005 following construction of the Shuǐniújiā dam 水牛家水坝. The legends and stories were narrated by Zhaga Tsere, a 69-year old native of Koshino, and translated into Chinese with the help of Lǐ Déguì 李德贵, a 64-year old native of Iarukhuai village (Luòtōngbà 洛通坝) and presently a resident of Píngwǔ. Hereafter I refer to the corpus as the Zhaga texts, after their narrator.

All the words for 'one' listed in Nishida and Sūn (1990: 357-359) have been attested in the Zhaga texts, but their relative frequency is different. In addition,  $[t \int u^{13} t \epsilon^{35}]$  in the corpus exists also in the shorter (and perhaps original) form  $[t \int u^{53}]$ .

Form	Meaning	Frequency
t∫ə <sup>53</sup>	'one'	7
Şə <sup>13</sup>	indefinite marker	58
t∫u <sup>53</sup> , t∫u <sup>13</sup> tε <sup>35</sup>	'single, alone'	30
ko <sup>53</sup>	'full'	10
hɔ <sup>35</sup>	'full'	9
Zə <sup>53</sup>	indefinite marker	9

Table 2 - Frequency of words for 'one' in the Zhaga texts9

[tf $\vartheta^{53}$ ], [s $\vartheta^{13}$ ], [tf $u^{53}$ ] and [tf $u^{13}$ t $\varepsilon^{35}$ ] and [ko<sup>53</sup>] all co-occur with a wide variety of words, whereas [ft $\vartheta^{35}$ ] and [z $\vartheta^{53}$ ] are restricted in distribution. Of the nine occurrences of [ft $\vartheta^{35}$ ], eight are in the same construction, 'one *chi* (Chinese unit measure, equivalent to 0.3 m)'. Likewise, of the nine occurrences of [z $\vartheta^{53}$ ], seven are in combination with 'year' and two in combination with 'tael'.

<sup>&</sup>lt;sup>9</sup> Zhāng (1997) already suggests that the forms  $[ko^{53}]$  and  $[fi5^{35}]$  are cognate with the Tibetan *gang* 'full', whereas  $[tf1^{53}]$ ,  $[f1^{13}]$  and  $[31^{53}]$  are all cognate with the Tibetan *gcig* 'one' (pp. 151-152). He does not, however, discuss the form  $[tf1^{13}t\epsilon^{35}]$ or the precise relationship between  $[tf1^{53}]$ ,  $[f1^{13}]$  and  $[31^{53}]$ .

As was the case with my direct elicitations,  $[\$ a^{13}]$  enjoys the highest frequency and  $[t \int u^{13} t \epsilon^{35}]$  is the second most favored way to express the meaning 'one'.

Let us now turn to the semantic distribution of these lexical items in the Zhaga texts. The generalizations below are mainly based on my fieldwork data, but I also rely on Sūn's data, whenever he reports lexical items not attested in my corpus.

3. SEMANTIC DISTRIBUTION OF WORDS FOR 'ONE' IN THE ZHAGA TEXTS

The following characteristics of words for 'one' have been taken into consideration in this analysis:

(a) their meaning as understood from the context;

(b) the type of classifiers with which each particular word for 'one' can co-occur.

For the convenience of the exposition, I divide Báimă classifiers into "container" and "non-container" classifiers. Container classifiers denote quantities of commodities and products, such as liquids and edibles, which normally require taking some kind of container (*cup*, *pot*, *pound*, etc.) as the measure classifier. For example, *cup* in the expression *one cup of tea* is a container classifier. Container classifiers may also function as nouns in their own right. Examples of container classifiers in Báimă are:  $[k^ha^{53}]$ 'mouth',  $[ka^{13}zi^{341}]$  'bowl',  $[sj^{13}tfo^{35}]$  'pot',  $[tf^ho^{13}za^{53}]$  'bucket',  $[dza^{341}]$  'pound',  $[so^{53}]$  'tael'. Some measures of length (for instance, '*chi*') can likewise function as container classifiers in Báimă.

As evidenced in the Zhaga texts, all lexical items for 'one' in Báimă have distinct meanings and functions.

3.1. [t∫ə<sup>53</sup>]

 $[t \int \partial^{53}]$  appears in contexts where the exact number, 'one', of the entity spoken about is communicated. Thus, it can be accounted

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for as having the meaning '(exactly) one (not two, three, etc.)'.  $[t_{\int} \overline{\sigma}^{53}]$  co-occurs with non-container classifiers, as in the following examples.<sup>10</sup>

In sentence (1), the protagonist of the story, a magic frog born into a human family, wants to bring lunch to his father, who is working in the fields. Since, as a frog, he does not have hands to carry lunch, he has to ask his mother to make a hole in one of the pancakes prepared for lunch and tie it with a rope to his neck.

(1)	$k^h u^{53}$	kε <sup>13</sup> du <sup>35</sup>	kε <sup>53</sup>	t <sup>h</sup> o <sup>13</sup> ndzu <sup>35</sup>	t∫ə <sup>53</sup>	ta <sup>55</sup>	şə <sup>53</sup> ,
	1S	neck	on	pancake	one	tie	IMP
	?	ske.?	kha	?	gcig	sdom	shog
	ho <sup>13</sup> ru	$p^{53}$ $p^{h}u^{53}$		mbo <sup>13</sup>	ze <sup>13</sup>	dze	<sup>35</sup> .
	hole	make	.a.hole	COM	be	said	
	?	phug		?	red	bzla	.S
	'So he s	said, "Tie	one par	cake to my n	eck, mał	ke a hole	in it".'

In the next example (taken from another story), the main character, a gifted Báimă scholar, travels in a company of friends to the county capital to take part in official examinations. On the way, they need to stay over in an inn.

(2)	şa <sup>53</sup>	t∫ə <sup>53</sup>	ndy <sup>13</sup>	ji <sup>53</sup>	çe <sup>13</sup>	de	13	şə <sup>13</sup> ,
	day	one	reside	NOM	mad	le wa	s.in	3PF
	zhag	gcig	'dug	?	byas	s bsc	lad	?
		-	<sup>3</sup> ndzi <sup>53</sup> n go			0	-	

<sup>&</sup>lt;sup>10</sup> This article represents work in progress; not all glosses and tone sandhi are final. As proposed by the anonymous *CLAO* reviewer, Classical Tibetan etymology is given for Báimǎ words in example sentences to make the article more accessible to Tibetologists. The "?" sign marks those cases where no good Classical Tibetan etymology can be proposed. In Tibetan transcriptions, I follow Wylie's (1959) standard system. Different verb stems are indicated in the gloss line by different tense forms of verbs.

rkang.ba re 'gro byas bsdad nas zhag ni<sup>341</sup> t∫ə<sup>53</sup> ndv<sup>13</sup> §ə<sup>13</sup>.11 sa<sup>53</sup> ce<sup>13</sup> de13 one day two live made was.in 3PF ? bsdad gcig zhag gnyis 'dug byas 'So, they stayed for one day... they went on foot and stayed one or two days.'

In both example sentences,  $[t]\partial^{53}$  is the numeral 'one'.

In two occurrences in the Zhaga texts,  $[t \int \delta^{53}]$  is reduplicated so as to express the meaning 'one by one' or 'each other' (cf. Sūn 1990: 218-219). Sentence (3) derives from a story about the rivalry between the villages of Iadzy (Huángyángguān 黃 羊关) and Koshino.<sup>12</sup> The bone of contention was the issue who had to pay taxes for land owned by wealthy Koshino people in Iadzy. This dispute cost many people their lives and at some point, a native of Koshino urged the people of these two villages to stop fighting.

(3)	ta <sup>53</sup>	Ia¹³d <b></b> <i>z</i> y	<sup>.35</sup> Zə <sup>13</sup>	Ko <sup>13</sup> şə	<sup>53</sup> ni <sup>341</sup>	te <sup>53</sup>	ta <sup>53</sup>
	now	Iadzy	with	Koshi	two	DU	now
	da(.lta)	PN	re	PN	gnyis	do	da(.lta)
	t∫ə <sup>53</sup> t∫ə	53	tso <sup>53</sup>	ma <sup>53</sup>	Z0 <sup>13</sup>		şε <sup>53</sup> .
	one.one	e	mutually	v not	manufa	cture	IMP
	gcig.gc	ig	?	ma	bzo		shog
	'People	of Iadz	y and Ko	shino, o	do not de	o this to	each other.'

<sup>&</sup>lt;sup>11</sup> The third person verbal suffix  $[s \mathfrak{S}^{13}]$  is homophonous (i.e. identical in form, but distinct in meaning) with the indefinite marker  $[s \mathfrak{S}^{13}]$ .

<sup>&</sup>lt;sup>12</sup> Ia<sup>13</sup>d $zy^{35}$  used to be populated by the Báimă and this name is quoted in many Báimă stories and legends. The Báimă population of Ia<sup>13</sup>d $zy^{35}$  is now completely sinified. Only older speakers have some passive knowledge of Báimă. The element [n5<sup>53</sup>] in the name of the Koshino village means 'inside', thus Koshino means 'inside Koshi'. The village is variously referred to as Koshi and Koshino.

In addition, the reduplication of  $[tf \partial^{53}]$  'one' is sometimes used to emphasize the number 'one', as in the next example:

(4)	zə <sup>341</sup> pı	u <sup>13</sup> sə <sup>35</sup>	je <sup>13</sup>	<b>z</b> ə <sup>53</sup>	ne <sup>53</sup>	t∫ə <sup>53</sup> t∫ə <sup>53</sup>	ndza <sup>13</sup>
	python		year	one	person	one.one	eat
	sbrul.?		lo	zhig	mi	gcig.gcig	'cha
	,	çe <sup>13</sup> made	de <sup>13</sup> . was.in				
	?	byas	bsdad				
	'Every	year the	python	ate one l	human b	eing.'	

3.2.  $[s a^{13}]$ 

 $[s \partial^{13}]$  is normally used when a person or thing is newly introduced in the story. It does not report the exact number 'one', but seems to act as an indefinite marker, narrowing down the reference of the preceding noun to a single member of a class. For example:<sup>13</sup>

(5)		na <sup>53</sup> na <sup>53</sup> here	Chi	nese.begg		INDF	arrive		
	· /	('di.)na gar came l	•••			shig	sleb	byon	
(6)	tç <sup>h</sup> ø <sup>53</sup> 2S	wε <sup>13</sup> wo frog		şə <sup>13</sup> , INDF	pu wit	0		wɛ¹³wơ frog	1 <sup>35</sup>

khyod	sbal.ba s	shig ?		sbal.ba
wa <sup>13</sup> gɛ <sup>3</sup>		pu <sup>13</sup> ndza	a <sup>53</sup> ts <sup>h</sup> ə <sup>35</sup>	ndzi <sup>53</sup>
frog.old		wife	search	go

<sup>&</sup>lt;sup>13</sup> The indefinite marker  $[\$ a^{13}]$  is homophonous (i.e. identical in form, but distinct in meaning) with the third person verbal suffix  $[\$ a^{13}]$ .

 $<sup>^{14}</sup>$  [-ka^{13}tsr^{53}] is probably a loan from Chinese, cf. Sichuanese  $\overleftarrow{\bowtie}\ \square\ \vec{\mp}$  [t^hau^{53} k^hau^{53}tsr^{53}] 'beggar'.

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khyod ?		'tshol	'gro
$ts^h a^{35}$	ndzi <sup>53</sup>	ze <sup>13</sup> ,	dze <sup>35</sup> .
search	go	be	said
'tshol	'gro	red	bzlas
, a wife	an old frog,	where are	going to
0.1 :			
,	ts <sup>h</sup> ə <sup>35</sup> search 'tshol , a wife	ts <sup>h</sup> ə <sup>35</sup> ndẓi <sup>53</sup> search go 'tshol 'gro	ts <sup>h</sup> ə <sup>35</sup> ndzi <sup>53</sup> ze <sup>13</sup> , search go be 'tshol 'gro red , a wife an old frog, where are

(7)	La <sup>13</sup> nga <sup>53</sup>	tçiouşı		a <sup>13</sup> ji <sup>53</sup>	ge <sup>13</sup> gu <sup>35</sup>
	Langa	just.be		grandmother	old
	PN	LW		a.yis	rgas.rgus
	şə <sup>13</sup>	de <sup>13</sup>		§ə <sup>13</sup> . <sup>15</sup>	
	INDF	was.in	3PF		
	shig	bsdad	?		
	'In Langa,	eh there w	as an	old lady.'	

 $[s \partial^{13}]$  co-occurs with non-container classifiers and can co-occur with two other words for 'one',  $[ko^{53}]$  and  $[t \int u^{13} t \epsilon^{35}]$ , as seen in the following sections.

3.3.  $[t \int u^{53}]$  and  $[t \int u^{13} t \varepsilon^{35}]$ 

 $[tfu^{13}t\epsilon^{35}]$  exists in two variants, the short form  $[tfu^{53}]$ , as in sentence (8), and the long form  $[tfu^{13}t\epsilon^{35}]$ , as in sentence (9). The syllable  $[tfu^{53}]$  in  $[tfu^{13}t\epsilon^{35}]$  changes its original high falling tone to the low rising tone when accompanied by a syllable in the high rising tone (see footnote 8).  $[tfu^{53}]$  and  $[tfu^{13}t\epsilon^{35}]$  have a wide range of meanings. In this section, I will provisionally gloss  $[tfu^{53}]$  and  $[tfu^{13}t\epsilon^{35}]$  according to their meaning in each particular sentence.

(8)	k <sup>h</sup> w <sup>53</sup>	t∫u <sup>53</sup>	ho¹³ja³⁵	şə <sup>13</sup> .
	1S	only.one	be.over	3PF

<sup>&</sup>lt;sup>15</sup> [tçiouş1] (or *jiu shi* in Pīnyīn transcription) is a loan from Chinese.

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? gcig.pu ? ?
'I was the only one left.' (literally, 'There was only me left.')
Sentence (8) is taken from a story about two brothers, one rich and
the other poor. The poor brother leads a happy life despite his
poverty, for he is always laughing and playing with his children; the
rich brother feels lonely and unhappy. One day, the rich brother
attempts to entertain himself and his wife by playing a ball game.
Since they are very wealthy, they use lumps of silver as balls, but
this does not cheer them up:

(9)	$\begin{array}{ll} t \varphi^{h} \varphi^{53} & k \partial^{13} t \\ 2S & piece \\ khyod & LW \end{array}$	e 1S		one.item
				t <sup>h</sup> ɔ <sup>13</sup> tçυ <sup>35</sup> DIR:down.the.slope ?
	set.out COM chas ?	laugh No dgod ? , I - a lump, o	OM not ma	
(10)	a <sup>13</sup> ma <sup>53</sup> , a <sup>1</sup> mother fa a.ma a.j	ther one	.entity gave	e.birth NOM
	ze <sup>13</sup> dzε <sup>35</sup> be said red bzlas	3PF		

'We are born of the same parents, he said.'

<sup>&</sup>lt;sup>16</sup> [kə<sup>13</sup>ta<sup>53</sup>] 'lump' is a Chinese loan, *gēda* 'lump, knot' (cf. Zhāng 1994b: 57).

Similar to  $[tf \vartheta^{53}]$  and  $[s\vartheta^{13}]$ ,  $[tf u^{13}t\varepsilon^{35}]$  does not co-occur with container classifiers. Unlike all other words for 'one' it can be used not only as an attributive, but also as a nominal phrase, e.g. in examples (9) and (11), which usage accounts for over a half of its occurrences in the Zhaga texts (19 instances out of 38). On three occasions,  $[tf u^{53}]$  and  $[tf u^{13}t\varepsilon^{35}]$  co-occur with the indefinite marker  $[s\vartheta^{13}]$ , for example:

 $k^{h}\epsilon^{53}$ ma<sup>13</sup>mu<sup>35</sup> \$**ə**<sup>13</sup> ni<sup>341</sup> te<sup>53</sup> tſu<sup>53</sup> (11)mother.daughter DU INDF 1P single two ? ma.?bu(.mo) gnyis do gcig.po shig ndʒa<sup>13</sup> ji<sup>53</sup>  $ze^{13}$ . eat NOM be 'cha ? red '(The python) is going to eat one of the two of us.' (literally, 'a single one of the two of us')

3.4. [ko<sup>53</sup>]

The original meaning of  $[ko^{53}]$  is 'full', as in  $[t \int^{h} u^{53} n di^{13} ko^{53}]$  'so full of water'. In the Zhaga texts, it co-occurs with container classifiers exclusively.

(12)	a <sup>13</sup> pi <sup>35</sup> ,	t∫ <sup>h</sup> ε <sup>35</sup>	ko <sup>53</sup>	t <sup>h</sup> e <sup>13</sup> ,	$dz\epsilon^{35}$ .
	grandfather	tobacco	full	smoke	said
	a.mes	?	gang	'then <sup>17</sup>	bzlas
	'Sir, smoke a	pipe, he said	d.' (litera	ılly, 'a pipe	e full of tobacco')

Examples of  $[ko^{53}]$  given in Nishida and Sūn (1990: 357-359) support the hypothesis that the usage of  $[ko^{53}]$  is restricted to container classifiers. For instance, 一锅  $[so^{13}tfo^{35} ko^{53}]$  'pot-full' (compare 一个锅  $[so^{13}tfo^{35} tf1^{53}]$  'one pot', 1990: 357), 一把(米)

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<sup>&</sup>lt;sup>17</sup> 'then means 'pull, draw' and is also used in the meaning 'smoke', cf. similar usage in Zhongu (Sun 2003a: 825).

 $[pa^{53}ri^{13} ko^{53}]$  'hand-full (of rice)' (1990: 358), 一口  $[k^{h}a^{53} ko^{53}]$  'mouth-full', 一碗  $[ka^{13}zi^{341} ko^{53}]$  'bowl-full', 一桶  $[t5^{13}zi^{53} ko^{53}]$  'bucket-full', 一缸  $[dza^{13}nbo^{53} ko^{53}]$  'vat-full' (ibid.).

 $3.5. [ho^{35}]$ 

In Sūn's examples (Nishida and Sūn 1990: 359),  $[fo^{35}]$ appears to co-occur with only two nouns, 'pound' and '*chi*', i.e.  $-f_{\Gamma}$   $[dza^{13}fo^{35}]$  'one pound', -R  $[k^ha^{13}fo^{35}]$  'one *chi*'. In my corpus, it is attested in combination with '*chi*' (8 occurrences) (e.g.  $[ja^{13}ci^{53}k^ha^{13}fo^{35}se^{33}]$  'a handkerchief of one *chi*') and on one occasion, with the word 'trough, manger', i.e.  $[tf^hu^{53} \gamma a^{13}fo^{35}]$  'one trough of water'. On three other instances of the use of 'trough, manger' in the Zhaga texts, this word rather co-occurs with  $[ko^{53}]$ 'full', i.e.  $[fa^{53}ma^{53} \gamma a^{13} ko^{53}]$  'one manger of peas',  $[tf^hu^{13}ndza^{35} \gamma a^{13} ko^{53}]$  'one through of water'. 'Pound', '*chi*' and 'trough' are all container classifiers.

3.6. [zə<sup>53</sup>]

Similar to  $[f_1 2^{35}]$ ,  $[z_1 2^{53}]$  is restricted in distribution. In Sūn's examples (Nishida and Sūn 1990: 359, 'year' p. 324), it is used in the following expressions:

一斗 [ʃo<sup>13</sup>ʒ1<sup>53</sup>] 'one bushel',
一两 [ʃɔ<sup>13</sup>ʒ1<sup>53</sup>] 'one tael',
一驮 [k<sup>h</sup>i<sup>35</sup>tʃ<sup>h</sup>a<sup>13</sup>ʒ1<sup>53</sup>] 'one sack (load carried on the back)',
一对 (一对手) [tʃ<sup>h</sup>a<sup>13</sup>ʒ1<sup>53</sup>] 'one pair (one pair of hands)',
一夜 [go<sup>13</sup>ʒ1<sup>53</sup>] 'one night',
一个月 [dza<sup>13</sup>z1<sup>53</sup>] 'one month'
一年 [iɐ<sup>53</sup>ʒ1<sup>53</sup>] 'year'.

Of these words, three are container classifiers ('bushel', 'tael' and 'sack') and four non-container classifiers ('pair', 'night' 'month' and 'year').

In the Zhaga texts,  $[z_i \overline{z}^{53}]$  co-occurs seven times with 'year', as in sentence (4), and two times with the word for 'tael', as in sentence (13):

(13)	t∫ <sup>h</sup> ε <sup>35</sup>	şa <sup>53</sup>	mbo <sup>13</sup>	ze13,	t∫ <sup>h</sup> ε <sup>35</sup>	şo <sup>13</sup>	<b>ζ</b> θ <sup>53</sup>
	tobacco	burn	COM	be	tobacco	tael	one
	?	?sregs	?	red	?	srang	zhig
	jɔ <sup>35</sup> k <sup>h</sup> u <sup>53</sup>		ze	<sup>13</sup> .			
	take.brin	g	be				
	?.khur	-	rec	1			
	'When th	ne toba	cco was	used	up, one u	ised to	borrow one
	tael of it.						

An explanation of the difference between  $[z_{i}\partial^{53}]$  and other words for 'one' follows in §4.2.

# 4. COUNTERPARTS OF BÁIMĂ WORDS FOR 'ONE' IN CLASSICAL TIBETAN AND TIBETAN DIALECTS

The distribution of various words for 'one' as outlined in the previous section, with the numeral 'one',  $[tf \partial^{53}]$ , an indefinite marker,  $[s \partial^{13}]$  and the word 'full' used with container classifiers in the meaning of 'one',  $[ko^{53}]$ , partly resembles the various usages of 'one' in Classical Tibetan and modern Tibetan dialects.

For the comparisons in this section, I use Classical Tibetan sources, in the tradition of Báimă studies (Zhāng 1994, 1997; Huáng and Zhāng 1995) and various Tibetan dialect data with an emphasis on the Khams group, to which Báimă allegedly belongs.

In Classical Tibetan, the numeral 'one' develops into the indefinite article, which has three phonologically conditioned forms: (1) *cig*, used if the preceding word ends in *ga*, *da*, or *ba*, as in *khab cig* 'a needle'; (2) *shig*, used after *sa*, as in *ras shig* 'a cloth'; and (3) *zhig* in all other cases (cf. Jäschke 1954: 19-20). Spoken

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varieties of Tibetan usually have one form for the indefinite article, for instance [tçi] in Khams (Mă and Hú 1987, vol 2, p. 7, Häsler 1999: 95).

The word for 'full', *gang* in Classical Tibetan, combines with container classifiers in the meaning 'one' in Classical Tibetan and modern Tibetan dialects. For instance, the *Zàng-Hàn dà cídiăn* [Comprehensive Tibetan-Chinese dictionary], edited by Zhāng Yísūn (1993), gives the second meaning of the word *gang* 'full' as 'one', which is illustrated with the following examples: *rgya-ma gang* 'one pound', *dkhar-yol gang* 'one bowl' and *gom-pa gang* 'one step' (Zhāng 1993, vol. 1, p. 339).<sup>18</sup> The expression 'one bowl' is listed in the *Tibeto-Burman lexicon* (Huáng et al. 1992) as a combination of the words 'bowl' and 'full' for, among others, Lhasa (Central) Tibetan,  $[p^{h}o:^{55}pa^{55} (k^{h}an^{13})]$  and 'Ba'-thang (Khams) Tibetan,  $[p^{h}o:^{55}no:^{55} (koi:^{13})]$ .

The three remaining Báimă words for 'one',  $[f_{0}5^{35}]$ ,  $[z_{0}5^{33}]$ and  $[t_{\int}u^{13}t\epsilon^{35}]$ , do not appear to have counterparts in Tibetan. Indigenous numeral systems are often among the earliest features lost when a language becomes endangered. They are susceptible to attrition through contact with another language even within an otherwise robust language, as argued by Comrie (2004). Do  $[f_{0}5^{35}]$ ,  $[z_{0}5^{33}]$  and  $[t_{\int}u^{13}t\epsilon^{35}]$  reflect some kind of substratum numeral system of Báimă which survived intensive contact of the Báimă with the Tibetans and the Chinese?

4.1. [fiɔ<sup>35</sup>]

As mentioned in §2.5,  $[fi3^{35}]$  co-occurs with container classifiers ('pound', '*chi*', 'trough'). The word 'trough' can be used with both  $[fi3^{35}]$  and  $[k0^{53}]$ . Let us consider the possibility that  $[fi3^{35}]$  is a phonologically conditioned allomorph of  $[k0^{53}]$ . Further scrutiny of the list of words with which  $[k0^{53}]$  and  $[fi3^{35}]$  co-occur,

<sup>&</sup>lt;sup>18</sup> Compare Bacot (1948: 30): *nga la ja dkar-yul gang 'khyer shog* "Apporte-moi une (pleine) tasse de thé."

reveals that  $[ko^{53}]$  is normally not used after the low back vowel [a], when the latter is not preceded by the nasal [nb] cluster, for instance, 一包(东西) 'one package' [tci<sup>53</sup>nba<sup>53</sup>ko<sup>53</sup>] (Sūn 1990: 358). Hence, it is plausible that  $[fo^{35}]$  is an allomorph of  $[ko^{53}]$  'full' after the low back vowel [a], e.g.  $[dza^{13}fo^{35}]$  'one pound',  $[k^ha^{13}fo^{35}]$  'one *chi*', [ya<sup>13</sup>fo^{35}] 'one trough'. That the word 'trough' can now co-occur with both  $[fo^{35}]$  and  $[ko^{53}]$  probably evidences erosion of this earlier distinction. It remains, however, unclear why  $[ko^{53}]$  and  $[fo^{35}]$  are dissimilar in their tonal contour. Unfortunately, the origin of this tonal dissimilarity is difficult to determine, given the limited set of examples.

4.2.  $[z_{\bar{z}}^{53}]$ 

 $[z \partial^{53}]$  co-occurs with both container ('bushel', 'tael', 'sack') and non-container classifiers ('pair', 'night', 'year' and 'month'). To compare, in Tibetan dialects, the first three words would be used with the word for 'full'. For example, 'one bushel (of barley)' is  $[n\epsilon^{13} mbo^{53} k\tilde{o}^{13}]$ , literally, 'barley bushel full', in Sde-dge Tibetan (Gésāng 2002: 151). 'One tael of gold' is  $[ser^{55}sap^{55}k^hap^{13}]$ , literally, 'gold tael full', in Gzhis-ka-rtse (Central) Tibetan (*ibid.*, p. 54).

The words 'pair', 'night', 'year' and 'month' are used with the numeral 'one' in Classical Tibetan and modern Tibetan dialects. For instance, 'one night' is *zhag gcig* in Classical Tibetan and  $[xa^{231} (tci^{253})]$  in 'Ba'-thang Tibetan; 'one month' is [zla ba (gtcig)] in Classical Tibetan and  $[nda^{13} (tci^{253})]$  in 'Ba'-thang Tibetan (Huáng et al. 1992: 304).

The modern Báimă situation does not suggest any particular feature which would unite the words that co-occur with  $[z_{\overline{o}}^{53}]$  'one' in one group, except, maybe, their relatively high frequency of occurrence. However, so are also 'pound' and '*chi*' which co-occur with [f<sub>0</sub><sup>35</sup>].

If we examine Classical Tibetan cognates of the Báimă words that co-occur with  $[z_i \overline{z}^{53}]$ , on the other hand, we find out that

English	Báimă		Tibetan	
'one bushel'	ş0 <sup>13</sup>	<b>z</b> ə <sup>53</sup>	'bo	zhig
'one tael'	§3 <sup>13</sup>	<b>z</b> ə <sup>53</sup>	srang	zhig
'one sack'	k <sup>h</sup> i <sup>35</sup> t∫ <sup>h</sup> a <sup>13</sup>	<b>Zə</b> 53	khal-cha	zhig
'one pair'	t∫ <sup>h</sup> a <sup>13</sup>	<b>Zə</b> 53	cha	zhig
'one night'	g0 <sup>13</sup>	<b>Zə</b> 53	dgong	zhig
'one month'	dza <sup>13</sup>	<b>Zə</b> 53	zla-ba	zhig
'one year'	je <sup>53</sup>	Zə <sup>53</sup>	lo	zhig

all of them can be grouped together by taking the phonologically conditioned form of 'one', *zhig* 'a'. Consider the following table:

Table 3. Classical Tibetan cognates for 'bushel', 'tael', 'sack', 'pair', 'night', 'year' and 'month' in Báimă

In these (high frequency) combinations, Báimă probably retained the original phonologically conditioned form of the Classical Tibetan weakened form of 'one', even after Báimă underwent phonological change and simplification of syllables. The form  $[s \bar{s}^{13}]$ pervasively took over other forms as the standard rendering of the indefinite marker.

4.3.  $[t \int u^{53}]$  and  $[t \int u^{13} t \varepsilon^{35}]$ 

The case of  $[t \int u^{53}]$  and  $[t \int u^{13} t \varepsilon^{35}]$  is more complex than that of  $[f_1 \varepsilon^{35}]$  and  $[z_1 \varepsilon^{53}]$ , given the frequent occurrence of the former as a nominal phrase.  $[t \int u^{53}]$  and  $[t \int u^{13} t \varepsilon^{35}]$  appears to be more than merely the numeral 'one'. Is it perhaps, as suggested in the *Yiyŭ*, some kind of fusion of the numeral 'one' (of which the initial cluster,  $[t \int]$ , is still present) and a classifier (cf. §2)?

Cross-linguistically, the numeral 'one' often undergoes such fusions with classifiers, as is, for instance, the case in Peking Mandarin, where the numeral 'one'  $y\bar{t}$ , fuses with the general

classifier *ge* 'item' into the form yi 'one item' (see Dŏng 2003, Liú 2004, Chirkova 2004). In Malayic languages, which like Báimă, have a large variety of forms for the numeral 'one', this multiplicity is the result of combining proclitic 'one' with a numeral classifier, which is then further reanalyzed as a simple numeral 'one' (Gil 2004). Such a scenario is, nonetheless, unlikely for Báimă, given its classifier-numeral word order.

Since the use of numerals in Báimă resembles that in Classical Tibetan and Tibetan dialects, it is reasonable to expect that  $[t \int u^{13} t \varepsilon^{35}]$  is a fusion of the numeral 'one' and a nominalizing suffix or a demonstrative. In fact, Classical Tibetan has at least two forms derived from the numeral 'one', which correspond to the meaning and function of  $[t \int u^{13}]$  and  $[t \int u^{13} t \varepsilon^{35}]$  in Báimă. One of these candidates is the noun *gcig-po* 'only, sole, alone, another', as for instance in *kho rang gcig-por yong-ba red* 'He came alone.' (Zhāng 1993, vol. 1, p. 740). Another form is the adverb *gcig-pu* 'alone, single, on one's own', as in *nga gcig-pur lus-pa* 'I am the only one left' (ibid.).

Overall, the relationship between Báimă  $[t(u^{13})]$  and  $[t \int u^{13} t \epsilon^{35}]$  with Tibetan gcig-po or gcig-pu is complex. The meaning of  $[t(u^{13})]$  and  $[t(u^{13}t\epsilon^{35})]$  overlaps with that of gcig-po or gcig-pu, but is not restricted to it.  $[t \int u^{13}]$  and  $[t \int u^{13} t \varepsilon^{35}]$  can mean not only 'single' or 'alone', but also more generally 'one'. For instance, of the examples of  $[t(u^{53})]$  and  $[t(u^{13}t\epsilon^{35})]$  given in §3.3,  $[t(u^{13})]$  in sentence (8) would correspond to Tibetan gcig-pu,  $[t \int u^{13} t \epsilon^{35}]$  in example (11) to gcig-po, while  $[t \int u^{13} t \epsilon^{35}]$  in sentences (9) and (10) corresponds to the numeral gcig 'one' (or the numeral followed by the definite article de 'that'). However, given the frequent occurrence of  $[t(u^{53}]$  and  $[t(u^{13}t\epsilon^{35})]$  as a nominal phrase, suggesting a nominalized form of 'one' being their origin, as well as their resemblance to gcig-po or gcig-pu, I propose to explore the possibility of the former being derived from the latter. In the reconstruction below, I take the shorter form,  $[t(u^{13})]$ , to be the original form and the longer one,  $[t(u^{13}t\epsilon^{35})]$ , a later development.

Based on systematic correspondences of Báimă to Classical Tibetan listed in Zhāng (1994a, b, 1997) and Huáng and Zhāng (1995), let us reconstruct what possible changes gcig on the one hand and the suffixes *po* and *pu* might have undergone in Báimă.

(1) words ending in *-ig* in Classical Tibetan systematically correspond to words ending in [i/1] (Zhāng 1994a: 16) or [i/ə] (Huáng and Zhāng 1995: 94) in Báimă. For instance, [t<sup>h</sup>igs] 'drop' in Tibetan becomes [t<sup>h</sup>i<sup>53</sup>] in Báimă (Huáng and Zhāng 1995: 94), *gcig* 'one' becomes [tſ1<sup>53</sup>] in Sūn's or [tſə<sup>53</sup>] in Huáng and Zhāng's transcription.

(2) The bilabial unvoiced stop p in the Tibetan suffixes pa and po changes to the bilabial semivowel w in Báimă, as pointed out by Huáng and Zhāng (1995: 88). For example, Tibetan  $[k^{h}an pa]$  'house' is  $[ngo^{21}wa^{53}]$  in Báimă (ibid.). When the Tibetan suffixes pa and po are preceded by m- or n-, p becomes mb. For example, 'alive' is [gson po] in Tibetan and  $[so^{21}mbu^{53}]$  in Báimă (ibid.).

Further examination of the examples of Tibetan-Báimă correspondences, listed in Zhāng (1994b) and Huáng and Zhāng (1995), suggests the following developments relevant for the present analysis:

(1) The suffix *po* systematically changes to *wu* (Huáng and Zhāng's transcription) or *u* (Sūn's transcription used by Zhāng Jìchuān). When *po* is preceded by a nasal, it changes to *mbu*. For instance, Tibetan 'finely grinded (flour)' [ndzam po] corresponds to [ndza<sup>21</sup>mbu<sup>53</sup>] in Báimă (Huáng and Zhāng 1995: 93), *sel-po* 'a basket carried on the back' is [she<sup>13</sup>u<sup>53</sup>] (Zhāng 1994b: 66).

(2) both *pa* and *po* correspond to a syllable in the high falling tone (53) in Báimă. For example, Tibetan *'ug-pa* 'owl' changes into  $[u^{35}ua^{53}]$  (Zhāng 1994a: 14), *bzang-po* 'good' into  $[ze^{13}u^{53}]$ 

('excellent' in Báimă), *mang-po* 'much, many' into [me<sup>13</sup>u<sup>53</sup>] (ibid., p. 13), [rtsam pa] 'roast barley flour' into [tsa<sup>21</sup>mba<sup>53</sup>] (Huáng and Zhāng 1995: 88).

On the basis of the above, the original Tibetan *gcig-po* 'only, sole, alone' yields  $*[t_1^{53}u^{53}]$  in Báimă.

Another probable candidate for the origin of  $[t \int u^{13}]$  in Báimă, *gcig-pu*, is likely to undergo similar changes. I could not find any words with the suffix *pu* in either Zhāng's or Huáng and Zhāng's lists of Tibetan-Báimă correspondences. Given the above pattern, it is nonetheless reasonable to postulate that such a combination in Tibetan would again yield the \*[t $\int 1^{53}u^{53}$ ] form in Báimă.

Hence, both *gcig-po* 'lonely, single' and *gcig-pu* 'single, the only one' are likely to develop into the Báimă form  $*[t_{j}1^{53}u^{53}]$ . This combination is then expected to collapse into  $[t_{j}u^{53}]$  through frequent usage. The transformation of  $[t_{j}u^{53}]$  into  $[t_{j}u^{13}t\epsilon^{35}]$  would tentatively proceed along the following lines.

In Báimă, topics are often marked by the word  $[t\epsilon^{53}]$  'that', as in the following sentence:

(14)	çe <sup>13</sup> lo <sup>35</sup> bird.eagle bya.glag	that	gu <sup>13</sup> l eveni dgon		ndzɛ <sup>35</sup> night mtshan	tse <sup>53</sup> arrive sleb	C C
	je <sup>13</sup> kɛ <sup>35</sup> everyday ?	that de	bird.eag bya.gla	gle	ti <sup>53</sup> that.OBL de.?	win	<sup>35</sup> pa <sup>53</sup> Ig og.pa
	zu <sup>341</sup> under	zu <sup>35</sup> keep	.warm	şə <sup>13</sup> . 3PF			
	zhabs	?		?			

'As for the eagle, in the evening, at night... every day, the eagle was keeping the child warm under its wings.'

[tfu<sup>53</sup>] (and [tfu<sup>13</sup>te<sup>35</sup>]) are often used as topics, cf. examples (8) to (10), in which function it commonly co-occurs with [te<sup>53</sup>]. The juxtaposition of [tfu<sup>53</sup>] and [te<sup>53</sup>] led to the change of the original high falling tone of [tfu<sup>53</sup>] to the low rising tone, i.e. [tfu<sup>13</sup>]. As was the case with [fto<sup>35</sup>], in this model, I again cannot explain why the high falling tone of the second syllable, [te<sup>53</sup>] changes to the high rising tone, [te<sup>35</sup>]. The same pattern (variation between the high falling and the high rising tone in the second syllable of a bisyllabic word) is observed in a number of words in Báimă, e.g. [so<sup>53</sup>] 'three', but [tfo<sup>13</sup>so<sup>35</sup>] 'thirteen' (Nishida and Sūn 1990: 356); 'to augment' is [k<sup>h</sup>e<sup>53</sup>ne<sup>53</sup>] or [fu<sup>53</sup>ne<sup>35</sup>], 'to devaluate' is [ko<sup>53</sup>3a<sup>53</sup>tfo<sup>35</sup>] (ibid., p. 371). The underlying mechanism of this alternation will hopefully be understood in due time.

Being reanalyzed as one form,  $[t \int u^{13} t e^{35}]$  is in turn frequently followed by  $[te^{53}]$  when acting as sentence topic, for example:

(15)	na <sup>53</sup>	şo¹³hu³5	ne <sup>53</sup>	tç <sup>h</sup> ø <sup>13</sup> nɔ <sup>53</sup>	pu <sup>53</sup>
	here	rich	person	family	son
	('di.)na	phyug.po	mi	khyim.nang	bu
	t∫u¹³tε³⁵	te <sup>53</sup>	şə <sup>53</sup>	mbo <sup>13</sup> §ə <sup>13</sup> .	
	only	that	die	COM 3PF	
	gcig.po	de	shi	??	
		son of a rich	family he	ere passed away.'	

Hence,  $[tfu^{13}t\epsilon^{35}]$  is  $[tfu^{53}]$  used as topic. After having coincided into the same form, the originally distinct meanings of *gcig-po* and *gcig-pu* are expected to get obscured with the possibility that the new form is reanalyzed into a more general word 'one'.

## 5. CONCLUSION

The six words for 'one' in Báimă,  $[tf e^{53}]$ ,  $[se^{13}]$ ,  $[tf u^{53}]$  and  $[tf u^{13}te^{35}]$ ,  $[ko^{53}]$ ,  $[ho^{35}]$  and  $[ze^{53}]$ , all have distinct meanings and

functions. The form  $[t_j \overline{o}^{53}]$  is the numeral 'one', the form  $[s_{\overline{o}^{13}}]$  the indefinite marker, the form  $[ko^{53}]$  means 'full'. In the meaning 'one',  $[ko^{53}]$  is restricted to co-occurrence with container classifiers. The form  $[f_{15}^{35}]$  is possibly a phonologically conditioned allomorph of  $[ko^{53}]$  'full', whereas the form  $[z_{\overline{o}^{53}}]$  appears to retain earlier phonologically conditioned form of the Classical Tibetan indefinite marker. Finally, the form  $[t_j u^{13} t \varepsilon^{35}]$  means '(single) one' and is frequently used as a nominal phrase.

As for the co-occurrence and interchangeability of the forms,  $[tf \circ^{53}]$  and  $[s \circ^{13}]$  are in a complementary relationship. They do not co-occur for the obvious reason that indefinite reference is incompatible with an exact number reference.  $[tf u^{13}t \varepsilon^{35}]$  is a fusion of the numeral 'one' with a nominalizing suffix and a demonstrative. Serving as a noun, i.e. 'one entity', it can take the indefinite article  $[s \circ^{13}]$ . In expressions without context, it is used as a synonym for (and thus interchangeable with) the word  $[tf \circ^{53}]$  'one'. Finally,  $[s \circ^{13}]$  freely co-occurs with expressions with the word  $[ko^{53}]$  'full'.

As far as the usage of various words for 'one' is concerned, Báimă resembles Tibetan. This suggests that Báimă and Tibetan share a common origin and that the former is perhaps even a dialect of the latter. At present, no one disputes the common origin of Báimă and Tibetan. As for Báimă as a Tibetan dialect, more research is required to determine the precise position of Báimă within Tibetan. This investigation promises to become one of the most exciting directions in Báimă studies.

#### Abbreviations

1, 2, 3	first, second, third person personal pronouns
COM	completion expressed by the suffix [mbo <sup>13</sup> ]
DIR	direction of the action
DU	dualis expressed by the form [te <sup>53</sup> ] 'two'
IMP	imperative
INDF	indefinite reference expressed by the word $[s \bar{s}^{13}]$

INST	instrumental expressed by the form $[r\epsilon^{53}]$
LW	loan word
NOM	nominalizer expressed by [ji <sup>53</sup> ] and [ma <sup>53</sup> ]
OBL	oblique case form
Р	plural
PF	perfective aspect
PN	place name
S	singular

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