

Phonology of Burmese loanwords in Jinghpaw

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Abstract: The aim of this paper is to provide a preliminary descriptive account of the phonological properties of Burmese loans in Jinghpaw especially focusing on their segmental phonology. Burmese loan phonology in Jinghpaw is significant in two respects. First, a large portion of Burmese loans, despite the fact that the contact relationship between Burmese and Jinghpaw appears to be of relatively recent origin, retains several phonological properties of Written Burmese that have been lost in the modern language. This fact can be explained in terms of borrowing chains, i.e. Burmese → Shan → Jinghpaw, where Shan, which has had intensive contact with both Burmese and Jinghpaw from the early stages, transferred lexical items of Burmese origin into Jinghpaw. Second, the Jinghpaw lexicon also contains some Burmese loans reflecting the phonology of Modern Burmese. These facts highlight the multistratal nature of Burmese loans in Jinghpaw. A large portion of this paper is devoted to building a lexicon of Burmese loans in Jinghpaw together with loans from other relevant languages whose lexical items entered Jinghpaw through the medium of Burmese.*

Key words: Burmese, Jinghpaw, Shan, loanwords, contact linguistics

1 Introduction

Jinghpaw is a Tibeto-Burman (TB) language spoken primarily in northern Burma (Myanmar) where, as with other regions of Southeast Asia, intensive contact among speakers

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Abbreviations for languages and language families dealt with in this paper are as follows: Arb. (Arabic); Bur. (Burmese); En. (English); Hin. (Hindi); IA (Indo-Aryan); Jg. (Jinghpaw); La. (Lacid); Lh. (Lhaovo); MB (Modern Burmese); Ng (Ngochang); P. (Pali); Per. (Persian); Por. (Portuguese); Ra. (Rawang); Sh. (Shan); Sk. (Sanskrit); TB (Tibeto-Burman); WB (Written Burmese); Za. (Zaiwa). Abbreviations in glosses are based on Leipzig Glossing Rules. Additional abbreviations are: COUP (couplet) and DECL (declarative).

from diverse linguistic backgrounds has been a long-standing phenomenon. For example, Jinghpaw serves as a lingua franca in northern Burma, spoken among the linguistically diverse Kachin people who form a complex socio-cultural society of shared cultural traits. Simultaneously, Jinghpaw is in contact with other linguistic groups of higher prestige such as Burmese. Building upon a lexicon of Burmese loans in Jinghpaw provided in Appendix A, this paper offers a preliminary descriptive account of the phonological properties of Burmese loans in Jinghpaw, focusing especially on their segmental phonology.¹ Burmese loan phonology in Jinghpaw, which exhibits the characteristics of both old and new strata in Burmese phonology, provides a case study of complicated contact situations in Southeast Asia.

This paper is organized as follows. Section 2 discusses the stratal nature of Burmese loans in Jinghpaw and its historical background. Section 3, beginning with initial consonants, provides a detailed description of Burmese loan phonology in Jinghpaw. Conclusions and future objectives are presented in Section 4. Appendix A presents Burmese loans in Jinghpaw, including other source languages whose lexical items filtered into Jinghpaw through the medium of Burmese, and Shan that has played an important role in introducing Burmese items into Jinghpaw. A brief sketch of the semantics of Burmese loans in Jinghpaw is provided in Appendix B. In the remainder of this section, I provide a brief literature review and sources of linguistic data presented in this paper.

1.1 Previous studies

Few previous studies have addressed the lexical borrowing between Burmese and Jinghpaw. Hanson (1896:87–8) is one of the earliest studies to identify about thirty Burmese loans in Jinghpaw. He highlights the important fact that several Burmese loans in Jinghpaw are also found in Shan, a Tai-Kadai language whose distribution partially overlaps with Jinghpaw making it difficult to determine whether a given word entered Jinghpaw from Burmese or Shan. Hanson (1906), a dictionary of Jinghpaw, is a significant contribution to the Burmese-Jinghpaw contact linguistics in that it identifies a number of Jinghpaw lexical items of Burmese origin with their source words in their orthographic transcription. Maran (1978), an updated dictionary of Hanson (1906), is also an important contribution that presents additional data. Dai and Xu (1995:265–6), based on a Jinghpaw dialect spoken in China, identify about two dozen Jinghpaw words

¹ Burmese loans in this paper include not only loans of Burmese origin but also loans that entered Jinghpaw through the medium of Burmese (see Section 1.2).

of Burmese origin. They observe that Burmese borrowings in Jinghpaw are culturally motivated, being primarily related to daily commodities or terms associated with politics, economics and culture. This paper is a first step to provide a detailed description of Burmese loan phonology in Jinghpaw.

1.2 Data and transcriptions

The data of Burmese loans in Jinghpaw presented here are collected based on Hanson (1906) and Maran (1978). The author identified corresponding Shan forms using the SEALang Library Shan Dictionary.² This paper also includes loans of Indic and European origin, most of which likely found their way into Jinghpaw through Burmese. This paper treats only established and integrated loans; regarding a given word as a loan only if it is listed in the aforementioned sources. Although spontaneous language mixing between Jinghpaw and Burmese is commonly found in ordinary Jinghpaw speech, this paper does not consider such cases as genuine loans (for more details see Section 2.4).

The data in this paper are primarily secondary data obtained from the following sources: Burmese (Myanmar Language Commission ed. 2009); Hindi (McGregor 1993); Jinghpaw (Maran 1978); Lacid (my field notes); Lhaovo (Sawada 2003, 2004, supplemented by my field notes marked by K); Mon (Jenny 2015); Ngochang (Nasaw Sampu et al. 2005); Pali (Rhys Davids and Stede, eds. 1921-1925); Persian (McGregor 1993); Rawang (LaPolla and Sangdong 2015); Sanskrit (Monier-Williams 1899); Shan (Sao Tern Moeng 1995); and Zaiwa (Lustig 2010). The Jinghpaw data based on Maran (1978) are given with slight modifications according to the phonemic transcription employed by Kurabe (2016). The Shan data based on Sao Tern Moeng (1995), an updated version of Cushing (1881 [1914]), are transcribed according to the system used in the SEALang Library Shan Dictionary. The transcription of Written Burmese (WB) is based on the system outlined by Duroiselle (1916) and the data for Modern Burmese (MB) are transcribed according to the system illustrated by Kato (2008). For details on the phonological systems of WB, MB, Jinghpaw, and Shan, the four main languages discussed in this paper, readers can refer to Duroiselle (1916), Kato (2008), Kurabe (2016), and Sao Tern Moeng (1995), respectively. The Lhaovo and Lacid data based on my field notes are provided in their orthographic forms (for the phonological systems and/or correspondences between phonological and orthographic transcriptions, see Sawada 2006 and Wannemacher 2011).

² <http://www.sealang.net/shan/dictionary.htm> (accessed December 4, 2016)

2 Stratal nature and historical background of Burmese loans

2.1 Co-existence of Written and Modern Burmese phonologies in Jinghpaw

The phonology of Burmese loans in Jinghpaw, by exhibiting two distinct phonological properties reflecting different historical periods, displays at least two strata of Burmese loans in Jinghpaw. The older loan stratum, whose items predominate over the other, consists of borrowings that display the phonological properties of WB that have been lost in MB. The younger stratum, on the other hand, consists of borrowings that display the phonological properties of MB. To illustrate this, let us compare two Burmese loans in Jinghpaw *ɲəráy* ‘hell’ and *me* ‘ballot’, where the former reflects the properties of WB (WB *ńarai*, MB *ɲǎyɛ*), in contrast to the latter that reflects properties of MB (WB *mai*, MB *mɛ*). The same holds for the contrast between (1a) and (b), where only the former retains the final velar of WB that has been reduced to a glottal stop in MB, and between (1c) and (d), where only the former retains the final bilabial nasal that has been merged into /N/ in the modern language together with other final nasals (for more examples see Section 3).

- (1) Examples representing separate loan strata
- a. ‘measles’ Jg. *wàksàk* (from WB *waksak*, MB *wɛʔθɛʔ*)
 - b. ‘screw’ Jg. *wéʔwu* (from WB *wak’ū*, MB *wɛʔʔù*)
 - c. ‘luck’ Jg. *gà̃m* (from WB *kaĩ̃*, MB *kà̃N*)
 - d. ‘pencil’ Jg. *khédan* (from WB *khaitaĩ̃*, MB *khédàn*)

2.2 Contact relationship between Jinghpaw and Burmese

Burmese, the national language of Burma, is the medium of education and communication throughout modern Burma. The majority of Jinghpaw speakers today are thus fully bilingual in Burmese from childhood (see also Section 2.4). This situation, however, does not seem to hold a century ago, as can be seen in the following quotation from Tegenfeldt (1974:174) who describes the situation in the early 1900s:

A few Kachin [Jinghpaw] young men who appeared especially promising and who had some knowledge of the Burmese language were sent for training to the Burman Theological Seminary at Insein, near Rangoon. The first of these seems to have been Zau Mai, son of a chief from the Shan State, who completed his course during the four years 1907-1911.... However, there were not many sent to Insein,

partly because of the Burmese language requirement, and partly because there undoubtedly was some question in the minds of the missionaries about the suitability of the training provided in an urban environment in Lower Burma for service in the Kachin Hills.

It is also of importance to note that the name of Jinghpaw or Kachin does not appear in Old Burmese inscriptions of the Pagan period (Luce 1959), where, along with the name of the extinct Pyu people, the names of other modern major ethnic groups in Burma such as Arakanese, Sgaw, Pwo, Mon, and Shan are already attested. This fact seems to suggest that the Jinghpaw people were, in general, not under the direct control of Pagan kings, and that intensive contact between Burmese and Jinghpaw is of relatively recent origin. The name “Kachin” itself, the Burmese exonym for the Jinghpaw and associated groups in northern Burma, seems to have a relatively short history.

2.3 Borrowing chains

The predominance of Burmese loans reflecting the conservative WB phonology in Jinghpaw is remarkable given that the intensive contact relationship between Burmese and Jinghpaw appears to be of relatively recent origin. The puzzle of the existence of conservative Burmese phonology in a language with a relatively short historical relationship with Burmese is attributable to borrowing chains. The Jinghpaw lexicon, together with a rich array of inherited words, contains a considerable number of foreign elements from languages belonging to both TB and non-TB stock, including Shan, Burmese, Chinese, Pali, and Sanskrit. It is not always the case that Jinghpaw borrowed a given word directly from a given source language. Matisoff (2013:24) provides the borrowing chains across several language families presented in (2), remarking that the Jinghpaw lexicon has a large number of Shan elements, and “[s]ome of these Shan items were themselves from Burmese, and in turn some of these were originally from Indo-Aryan”. Jinghpaw, which serves as a lingua franca among the ethno-linguistically diverse Kachin people, further introduced some of these items into languages inside the Jinghpaw sphere of influence such as Rawang.

(2) Borrowing chains

Pali (IA) → Burmese (TB) → Shan (Tai) → Jinghpaw (TB) → Rawang (TB)

Many Burmese loans with conservative phonological characteristics thus entered Jinghpaw, not directly from Burmese but by way of Shan, a language that has a well-

established historical relationship with both Burmese and Jinghpaw. The early contact relationship between Shan and Burmese is well attested to the extent that the Shan people, after the fall of the Pagan dynasty of Burmese kings in A.D. 1287, swiftly gained power and established several kingdoms ruled by Burmanized Shan kings in Central Burma. It is thus fairly likely that Shan borrowed Burmese lexical items from early stages. A number of Burmese loans in Shan that exhibit the phonological properties of early Burmese also indicates this scenario. The contact relationship between Shan and Jinghpaw is also well established. The Jinghpaw lexicon, in which there are more Shan loans than from any other languages (Kurabe to appear), shows that the most prominent donor language of loans in Jinghpaw is Shan, with which Jinghpaw has been in contact relationship for the past centuries. The intensive contact between the Shan and Jinghpaw people is well attested to the extent that, as a result of cultural assimilation, it is not infrequent that a Jinghpaw “becomes a Shan” (Leach 1954:30). A large number of Burmese loans with conservative phonology being also found in Shan (Hanson 1896:87–8) were thus introduced into Jinghpaw through the medium of Shan not directly from Burmese.

To summarize, the conservative phonological properties in many Burmese loans in Jinghpaw, together with historical evidence indicating recent contact between Burmese and Jinghpaw, suggest that a large number of Burmese items filtered into Jinghpaw through Shan. The fact that some Jinghpaw words of Burmese origin have additional non-etymological Shan elements further supports this scenario. WB *un*³ ‘coconut’, for example, is borrowed into Jinghpaw as *məʔún* (cf. Shan *maak²ʔun¹*) with a Shan class term *maak²* ‘fruit’ that frequently occurs in Shan fruit names, just like many other Shan fruit names borrowed into Jinghpaw (Kurabe to appear).

2.4 Loans and code-switching

As noted earlier among Burmese loans of different origins, the majority of established loans belong to the older stratum having been introduced into Jinghpaw through Shan. This does not imply, however, that Jinghpaw is resistant to Burmese influence. Rather, modern Jinghpaw, with the majority of speakers being fully bilingual in Burmese from a very young age, is greatly influenced by Burmese. This can be observed in the code-switching (both alternational and insertional) that occurs among modern Jinghpaw speakers who frequently insert Burmese elements into their ordinary speech, whether they are words, phrases, or utterances, even when there is no need to compensate for lexical gaps. The following extract from a Jinghpaw monologue illustrates insertional switches within a single sentence, where a Burmese noun phrase *shānwín dô* ‘turmeric’ and a Burmese

idiomatic phrase *bà dô pà dô* ‘something like that’ are inserted:

- (3) *ɕánthe ɕədu ʔay gò yáʔ ná dzòn shǎnwín dô bà dô pà dô*
 3pl cook NMLZ TOP now GEN like turmeric PL what PL COUP PL
n-baŋ ʔay.
 NEG-put DECL
 ‘They don’t, unlike today, put turmeric and the like into what they are cooking.’

Although instances of lexical insertions like (3) can be widely observed, this paper distinguishes such types of spontaneous language mixing from borrowing, which is essentially a diachronic process. In what follows, as noted in Section 1.2, we shall study established and integrated loans alone, regarding a given word as a loan only when it is listed in Hanson (1906) and Maran (1978).

3 Phonology of Burmese loans

This section deals with the phonological properties of Burmese loans in Jinghpaw in terms of initials (3.1), open rhymes (3.2), nasal rhymes (3.3), and checked rhymes (3.4) by comparing them with Burmese and Shan through the medium of which, as noted in Section 2.3, many Burmese words entered Jinghpaw. Section 3.5 presents a brief summary of the importation and adaptation observed in Burmese loans in Jinghpaw.

3.1 Initial consonants

Table 1 below displays the correspondences of initial obstruents between WB, MB, Shan, and Jinghpaw attested in our data in Appendix A. Since Burmese initials have not undergone drastic sound changes compared with its rhymes, it is often difficult to determine whether a given loan in Jinghpaw reflects the phonology of WB or MB.

Table 1 Correspondences between initial obstruents

WB	p	ph	b	t	th	d	k	kh	g	c	ch	j	s	h
MB	p	ph	b	t	th	d	k	kh	g	s	sh	z	θ	h
Sh	p	p ^h	p	t	t ^h	t	k	k ^h	k	ts	s ^h	ts	s ^h	h
Jg	p/b	ph	b	t/d	th	d	k/g	kh	g	c/j/ts	s	j/ɕ	s	kh/h

Shan and Jinghpaw, as demonstrated in Table 1, faithfully retain Burmese voiceless aspirated stops, as illustrated by (4a) to (c), mapping them straightforwardly to their

equivalents. Some voiceless unaspirated stops of Burmese, as in (4d) and (e), are mapped to their Shan equivalents and to either voiceless or voiced Jinghpaw counterparts, the conditioning factor of which is unknown. Voicing instability of loans in Jinghpaw is also observed for Shan loans in Jinghpaw (Kurabe to appear). As far as our data reveals, Burmese voiced stops that were devoiced in Shan with no voice contrast regularly correspond to Jinghpaw voiced stops as in (4f). This fact can be taken to suggest that they entered Jinghpaw directly from Burmese. It is also possible, however, that the correspondence is merely accidental given the insufficient data and voicing instability of loans.

(4) Correspondences of stops

- a. ‘raft’ WB *phoñ*, MB *phàun*, Sh. *p^hɔŋ²*, Jg. *phoŋ*
- b. ‘jail’ WB *thoñ*, MB *thàun*, Sh. *t^hɔŋ²*, Jg. *thoŋ*
- c. ‘bell’ WB *khoi³loi³*, MB *kháunláun*, Sh. *k^hɔŋ⁴lɔŋ⁴*, Jg. *khonlon*
- d. ‘class’ WB *tan³*, MB *tán*, Sh. *taan⁴*, Jg. *tán*
- e. ‘fort’ WB *tap* (from Mon), MB *taʔ*, Sh. *tap⁵*, Jg. *dàp*
- f. ‘rheumatism’ WB *dūlā* (from Sanskrit), MB *dùlà*, Sh. *tu²laa²*, Jg. *dula*

WB /c/ that has developed into MB fricative /s/ is reflected with /ts/ in Shan. As illustrated by (5a) and (b), it corresponds to Jinghpaw /c, j, ts/ suggesting different periods or paths of borrowing (i.e. Bur. > Jg. or Bur. > Sh. > Jg.). Based purely on phonological similarity, Jinghpaw /c, j/ appears to reflect WB /c/ while Jinghpaw /ts/ appears to reflect Shan /ts/. The fact that /ts/ in loans of Shan origin is always mapped to Jinghpaw /c, j/, however, obscures the correspondences (Kurabe to appear). As exemplified by (5c) to (e), WB /ch/ and /j/ that have become MB /sh/ and /z/ are usually mapped to /s^h/ and /ts/ in Shan and to /s/ and /j, ɬ/ in Jinghpaw, where words showing the WB /j/ vs. MB /z/ vs. Jg. /ɬ/ ([ɬ] ~ [z]) correspondence appear to be of recent origin.

(5) Correspondences of affricates

- a. ‘machine’ WB *cak* (from Pali), MB *sɛʔ*, Sh. *tsaak³*, Jg. *jàk*
- b. ‘envelope’ WB *cā’it*, MB *sàʔeiʔ*, Jg. *tsaʔík*
- c. ‘teacher’ WB *charā*, MB *shəyà*, Sh. *s^hraa²*, Jg. *səra*
- d. ‘Jataka’ WB *jāt* (from Pali), MB *zaʔ*, Sh. *tsaat³*, Jg. *jàt*
- e. ‘spoon’ WB *jwan³*, MB *zún*, Jg. *dzún*

The two WB fricatives, as illustrated by (6a) and (b), are mapped to close equiv-

alents in Shan and Jinghpaw. Jinghpaw, as illustrated by (6b), sometimes displays hesitation between /kh/ and /h/ for the voiceless glottal fricative of Burmese. This can be accounted for in terms of the competition between importation and adaptation: the phoneme /h/ is only restricted to interjections and mimetic words in the Jinghpaw native phonology (see Section 3.5).

(6) Correspondences of fricatives

- a. ‘Murraya’ WB *sanapkhā*³, MB *θāñkhá*, Sh. *s^ha¹naap³k^haa⁴*, Jg. *sə̀nàpkhá*
 b. ‘preach’ WB *ho*, MB *hó*, Sh. *hó⁴*, Jg. *hó ~ khó*

The regular phonological mapping of initial sonorants between source and borrowing languages attested in our data is summarized in Table 2.

Table 2 Correspondences between sonorants

WB	m	mh	n	nh	ñ	ṇ	r	rh	l	lh	w	wh	y	yh
MB	m	hm	n	hn	ṇ	ṇ	y	ɕ	l	hl	w	hw	y	ɕ
Sh	m	m	n	n	ṇ	ṇ	r/j	s ^h	l	l	w	–	j	–
Jg	m	m	n	n	ny	ṇ	r/y	s/ɕ	l	l	w	–	y	–

The voiced nasal, liquid and glide of Burmese, as given in (7a) and (b), are faithfully preserved in Shan and Jinghpaw without any substitution.³ On the other hand, the voiceless sonorants are replaced with their voiced counterparts in the borrowing languages to conform to their native phonologies where voiceless sonorants are absent, as illustrated by (7c) and (d). As (7e) and (f) exemplify, WB liquid *r* that appears to have been shifted to /y/ by the end of the 18th century (Nishi 1999:6) is mapped both in Shan and Jinghpaw to /r/ or /y/, the latter of which suggests its recent origin. The WB voiceless liquid *rh* that has developed into MB fricative /ɕ/ is reflected as /s^h/ in Shan. The phonological similarity suggests that loans displaying this correspondence were introduced into Shan after the fricativization of the WB voiceless liquid. This sound, as exemplified by (7g), is reflected in Jinghpaw either with /s/ or /ɕ/, the former of which appears to have been introduced into Jinghpaw through Shan and the latter directly from Burmese, based on their phonological similarities.

³ A few exceptions include WB *jalun* ‘bowl’ (MB *zāloun*) that appears as *jəruŋ* in Jinghpaw (cf. Shan *tsa¹luŋ²*).

(7) Correspondences of sonorants

- a. ‘prince’ WB *mañ³sā³*, MB *mínθá*, Sh. *maŋ⁴sʰaa⁴*, Jg. *máŋsá*
- b. ‘intellect’ WB *ñāṇ* (from Pali), MB *ɲàN*, Sh. *ɲaan²*, Jg. *nyàn*
- c. ‘offer’ WB *lhū*, MB *hlù*, Sh. *lu²*, Jg. *lu*
- d. ‘certificate’ WB *lakmhat*, MB *leʔhmaʔ*, Sh. *laak³maat³*, Jg. *làkmàt*
- e. ‘office’ WB *ruṁ³*, MB *yóun*, Sh. *ruŋ⁴*, Jg. *ruŋ*
- f. ‘affair’ WB *are³*, MB *ʔăyé*, Sh. *ʔa¹je⁴*, Jg. *ʔəye*
- g. ‘be messy’ WB *rhup*, MB *ɕouʔ*, Sh. *sʰuk⁵*, Jg. *ɕúk ~ sùksàk*

Table 3 displays the correspondences involving consonant clusters between WB, MB, Shan, and Jinghpaw.

Table 3 Correspondences between consonant clusters

WB	py	phy	ky	khy	my	pr	phr	kr	khr	mr
MB	py	phy	c	ch	my	py	phy	c	ch	my
Sh	–	–	kj	kʰj	mj	p(y)	–	kj/ts	–	mj
Jg	–	–	ky/gy/j	khy	my	py	–	ky/c	–	my

Burmese loans in Shan and Jinghpaw, compared with MB where some clusters were affricated, preserve WB consonant clusters well, as (8a) illustrates. WB clusters with a liquid that were palatalized in MB appear with medial /y/ in Shan and Jinghpaw, as in (8b). There are some instances, as provided in (8c), where WB clusters are, like MB, mapped to affricates in Jinghpaw. These can be viewed as representing the recent stratum of Burmese loans in Jinghpaw.

(8) Correspondences of consonant clusters

- a. ‘to rest’ WB *khyam³sā*, MB *chánθà*, Sh. *kʰjaam⁴sʰaa²*, Jg. *khyámsà*
- b. ‘emerald’ WB *mra*, MB *myâ*, Sh. *mja⁵*, Jg. *mya*
- c. ‘school’ WB *kyoñ³*, MB *cáun*, Sh. *kjəŋ⁴*, Jg. *jòŋ*

3.2 Open rhymes

Table 4 shows the correspondences of open rhymes between WB, MB, Shan, and Jinghpaw.

Table 4 Correspondences between open rhymes

WB	a	ā	i	ī	u	ū	e	ai	ay	o	ui
MB	a	a	i	i	u	u	e	ε	ε	ɔ	o
Sh	a/aa	a/aa	–	i	u	u	e	aaɟ/ε	aaɟ	ɔ	o
Jg	a	a	–	i	u	u	i/e	ay/e	ay/e	o	u

WB open rhymes, as illustrated by (9), are usually mapped to their equivalents in Shan and Jinghpaw straightforwardly. WB rhyme *e*, as seen in (9f) and (g), appears as either /i/ or /e/ in Jinghpaw, the condition of which is unknown. There are some instances, such as (9h), where Jinghpaw shows hesitation between /i/ and /e/. WB rhyme *ui*, which represents [o] as in MB (Bradley 1985:189), appears as /o/ in Shan and /u/ in Jinghpaw. The mapping from /o/ to /u/ is also attested well in Shan loans in Jinghpaw (Kurabe to appear), e.g. *dùsàt* ‘animal’ (from Shan *to¹s^hat⁴*).

(9) Correspondences of open rhymes

- a. ‘emerald’ WB *mra*, MB *myâ*, Sh. *mjaa⁵*, Jg. *mya*
- b. ‘rank’ WB *arā*, MB *ʔăyà*, Sh. *ʔa¹jaa²*, Jg. *ʔəya*
- c. ‘lottery’ WB *thī*, MB *thì*, Sh. *t^hi²*, Jg. *thi*
- d. ‘work’ WB *amhu*, MB *ʔăhmû*, Sh. *ʔa¹mu⁵*, Jg. *ʔəmu*
- e. ‘offer’ WB *lhū*, MB *hlù*, Sh. *lu²*, Jg. *lu*
- f. ‘affair’ WB *are³*, MB *ʔăyé*, Sh. *ʔa¹je⁴*, Jg. *ʔəye*
- g. ‘law’ WB *upade* (from Pali), MB *ʔûbədè*, Sh. *u⁵pa⁵te²*, Jg. *ʔûbədi*
- h. ‘deputy commissioner’ WB *are³puiñ*, MB *ʔăyébàin*, Jg. *ʔəyébyeɿ ~ ʔəyébyiŋ*
- i. ‘preach’ WB *ho*, MB *hó*, Sh. *ho⁴*, Jg. *khó ~ hó*
- j. ‘interest’ WB *atui³*, MB *ʔătó*, Sh. *ʔa¹to⁴*, Jg. *ʔətú*

WB rhymes *ai* and *ay* that have developed into MB /ε/ are mapped to either /aaɟ/ or /ε/ in Shan and to /ay/ or /e/ in Jinghpaw. This fact, as noted in Section 2.3, is due to the different paths or periods of borrowing. Compare:

(10) Correspondences of open rhymes with WB *ai* and *ay*

- a. ‘hell’ WB *íarai*, MB *ŋăyé*, Sh. *ŋaa⁴raaɟ⁴*, Jg. *ŋəráy*
- b. ‘pencil’ WB *khaitaĩñ*, MB *khédàn*, Sh. *k^hε⁴taan²*, Jg. *khédan*
- c. ‘sea’ WB *paiñlay*, MB *pìnlè*, Sh. *paay²laaɟ²*, Jg. *pañlay*
- d. ‘herring’ WB *ĩā³phay*, MB *ŋăphè*, Jg. *ŋáʔùphe*

3.3 Nasal rhymes

Table 5 presents the correspondences of nasal rhymes with WB *a* between WB, MB, Shan, and Jinghpaw.

Table 5 Correspondences between nasal rhymes with WB *a*

WB	am	aĩ	an	aĩ	aĩ
MB	aN	aN	aN	i/e/ε	iN
Sh	aam	am/aam	aan	ε	aŋ/aan
Jg	am	am/an	an	e	aŋ/an

Contrasts of WB final nasals (except *ĩ*) that have merged into /N/ in MB are often preserved in loans that entered Shan and Jinghpaw, as illustrated by (11a) to (d). WB rhyme *aĩ* that is reflected with three reflexes in MB appears as /ε/ and /e/ in Shan and Jinghpaw respectively, as shown in (11e). There are also some instances where Jinghpaw has final /n/ for WB finals *ĩ* and *ĩ* as in (11f), which indicate their status as recent loans. Variation in Jinghpaw such as (11g) is due to the the different periods or paths of borrowing: the form with final *n* is of recent origin, having entered Jinghpaw directly from Burmese, while the form retaining WB final *ĩ* is a loan that entered Jinghpaw through Shan.

(11) Correspondences of nasal rhymes with WB *a*

- a. ‘to work’ WB *tham*³, MB *tháN*, Sh. *t^haam*⁴, Jg. *thám*
- b. ‘luck’ WB *kaĩ* (from Pali), MB *kàN*, Sh. *kaam*², Jg. *gàm*
- c. ‘telescope’ WB *mhanproĩ*³, MB *hmànbyáUN*, Sh. *maan²pjɔŋ*⁴, Jg. *manpyóŋ*
- d. ‘capital’ WB *araĩ*³, MB *ʔəyín*, Sh. *ʔa¹raaŋ*⁴, Jg. *ʔáráŋ*
- e. ‘disciple’ WB *tapaĩ*¹, MB *dăbê*, Sh. *ta¹pɛ*⁴, Jg. *səpé*
- f. ‘oil’ WB *renaiĩ*, MB *yènàN*, Jg. *yenan*
- g. ‘bottle’ WB *pulaiĩ*³, MB *pălín*, Sh. *pa¹lɛŋ*⁴, Jg. *pələŋ* ~ *pəlín*

WB labialized rhymes *-wan* and *-waĩ* that are reflected in MB by /uN/ and /wiN/ appear as /un/ and /un/ respectively in Shan and Jinghpaw, as illustrated by (12a) and (b). WB palatalized rhyme *-yam*, as given in (12c), is retained as such in Shan and Jinghpaw. Note that the PTB palatalized rhyme **-yam* has regularly developed into /en/ in Jinghpaw (Benedict 1972:51, Matisoff 2003:252), e.g. Jg. *pyen* ‘fly’ (from PTB **byam*, cf. WB

pyam) and Jg. *khyen* ‘snow’ (from PTB **kyam*, cf. WB *khyam*³). The structural gap in the Jinghpaw native phonology once created by this sound change is filled by Burmese loans suggesting that they entered Jinghpaw after the sound change.

(12) Correspondences of WB labialized or palatalized nasal rhymes

- a. ‘doctor’ WB *charāwan*, MB *shəyəwùn*, Sh. *s^hraa²wun²*, Jg. *tsì-sərawùn*⁴
- b. ‘olive’ WB *sarīlwai*, MB *θànlwìn*, Sh. *s^haan²lun²*, Jg. *tsanlun*
- c. ‘to rest’ WB *khyam³sā*, MB *chánθà*, Sh. *k^hjaam⁴s^haa²*, Jg. *khyámsà*

Phonological correspondences of WB nasal rhymes other than *a* are summarized in Table 6.

Table 6 Correspondences between nasal rhymes other than WB *a*

WB	im	in	uĩ	un	oĩ	uiĩ
MB	eĩ	eĩ	oun	oun	aun	aiĩ
Sh	–	iŋ	uŋ	un	ɔŋ	ɛŋ/uŋ
Jg	–	iŋ	uŋ	un	oŋ	ɛŋ/uŋ

It is of importance to note that WB final nasals, when preceded by high vowels, are often mapped as velars in Shan and Jinghpaw not always being faithfully replicated in the borrowing languages. The regular mapping of WB rhymes *in* and *uĩ* in Shan and Jinghpaw are thus /iŋ/ and /uŋ/, as illustrated by (13a) and (b).⁵ A parallel development is also observed for checked rhymes with high vowels, e.g. WB *ip*, *it* → /ik/, WB *up*, *ut* → /uk/ (see Table 7 in Section 3.4). This “velarization”, however, does not hold for WB *un*, as in (13c). WB rhyme *uiĩ*, as exemplified by (13e), is usually mapped to /ɛŋ/ and /eŋ/ in Shan and Jinghpaw respectively. In (13f), it is adapted as /uŋ/ that, based on their phonological similarity, seems to reflect the older form of Burmese.

(13) Correspondences of nasal rhymes with vowels other than WB *a*

- a. ‘time’ WB *akhyin*, MB *ʔăcèĩ*, Sh. *k^hiŋ²*, Jg. *khyiŋ*
- b. ‘office’ WB *ruĩ³*, MB *yóun*, Sh. *ruŋ⁴*, Jg. *ruŋ*
- c. ‘goods for sale’ WB *kun*, MB *kòun*, Sh. *kun²*, Jg. *gùn*

⁴ The first syllable *tsì* refers to ‘medicine’ in Jinghpaw.

⁵ Exceptions include Jg. *sĩ* from WB *cĩ* ‘diamond’ (ultimately from Pali, cf. MB *sèĩ*), for which Shan presents a regular correspondence (i.e. *tsiŋ²*), and Jg. *thun* ‘lime’ from WB *thuĩ³* (cf. MB *thóun*, Sh. *t^hun¹*), which seems to be of recent origin.

- d. ‘jail’ WB *thoñ*, MB *thàun*, Sh. *t^hɔŋ²*, Jg. *thoŋ*
 e. ‘shop’ WB *chuiñ*, MB *shàin*, Sh. *s^hɛŋ²*, Jg. *seŋ*
 f. ‘goal’ WB *pan³tuiñ*, MB *pándàin*, Sh. *paan⁴tui⁴*, Jg. *bandùŋ*

3.4 Checked rhymes

Table 7 presents the correspondences of checked rhymes between WB, MB, Shan, and Jinghpaw.

Table 7 Correspondences between checked rhymes

WB	ap	at	ac	ak	ip	it	up	ut	ok	uik
MB	aʔ	aʔ	iʔ	ɛʔ	eiʔ	eiʔ	ouʔ	ouʔ	auʔ	aiʔ
Sh	ap/aap	at/aat	ɛt/et	ak/aak	ik	ik	uk	uk	ɔk	ɣk/ɛk/uk
Jg	ap	at	et	ak	ik	ik	uk	uk	ok	ik/ek/uk

The contrasts of WB final stops (except *c*) that have been lost in MB when preceded by WB *a* are well-preserved in Burmese loans that have entered Shan and Jinghpaw, as illustrated by (14a) to (c). The final velar stop that is restricted in the Jinghpaw native phonology is faithfully imported into Jinghpaw (through Shan) without substitution. WB rhyme *ac* appears as /ɛt, et/ and /et/ in Shan and Jinghpaw respectively, as in (14d).⁶

(14) Correspondences of checked rhymes with WB *a*

- a. ‘fort’ WB *tap* (from Mon), MB *taʔ*, Sh. *tap⁵*, Jg. *dàp*
 b. ‘butter’ WB *thopat*, MB *thóbaʔ*, Sh. *t^hɔ⁴paat³*, Jg. *thóbàt*
 c. ‘era’ WB *lakthak*, MB *lɛʔthɛʔ*, Sh. *laak³t^haak³*, Jg. *làkthàk*
 d. ‘guilt’ WB *aprac* (from Pali), MB *ʔəpyiʔ*, Sh. *ʔa¹pɛt³*, Jg. *ʔəpyét*

It is noteworthy that WB finals *t* and *p*, when preceded by high vowels, are regularly replaced with velar finals in Shan and Jinghpaw, as illustrated by (15).⁷ A parallel development, as noted in Section 3.3, is also observed for nasal finals. The WB rhyme *uik*, as illustrated by (15f) and (g), appears in various forms in Shan and Jinghpaw, where forms with front vowels seem to be of recent origin in contrast to forms with the back vowel that appear to be older.

⁶ Some of the WB rhyme *ac* came from *-yat* (Professor Hideo Sawada, p.c., 2016).

⁷ A few exceptions include Jg. *wùt* ‘brick’ from WB *ut* (ultimately from Pali, cf. MB *ʔouʔ*, Sh. *ʔut²*), and Jg. *jàrit* ‘provisions for a journey’ from WB *carit* (cf. MB *zǎyeiʔ*, Sh. *tsa¹rip³*).

- (15) Correspondences of checked rhymes with vowels other than WB *a*
- a. ‘stamp’ WB *tainchip*, MB *dăzeiʔ*, Sh. *tan⁴s^hik³*, Jg. *dədzik*
 - b. ‘linen cloth’ WB *pit*, MB *peiʔ*, Sh. *pik³*, Jg. *pík*
 - c. ‘be messy’ WB *rhup*, MB *əouʔ*, Sh. *s^huk⁵*, Jg. *ɛúk ~ sùksàk*
 - d. ‘camphor’ WB *parut*, MB *pəyouʔ*, Sh. *pa¹ruk³*, Jg. *pəyúk*
 - e. ‘cannon’ WB *amrok*, MB *ʔămyauʔ*, Sh. *ʔa¹mjək³*, Jg. *ʔəmyòk*
 - f. ‘paisa’ WB *puikchain* (from Hindi), MB *paiʔshàn*, Sh. *pək⁵s^haan²*, Jg. *pyèksan*
 - g. ‘fit’ WB *tuik*, MB *taiʔ*, Sh. *t^huk²*, Jg. *thúk*

3.5 Importation and adaptation

As we have seen above, Jinghpaw often preferentially imported Burmese segments (sometimes through Shan) without substitution, occasionally even at the cost of restrictions to its native phonology. Loanwords, thus, may sometimes violate native phonological constraints such as those given in Table 8, which are usually restricted in native words (some of which are exceptionally allowed in mimetic words⁸): (a) final /k/; (b) initial /h/; (c) /w/ before front vowels; (d) /ŋ/ before front vowels; (e) minor syllable /ŋə/.

Table 8 Native constraints violated in loans

	(a)	(b)	(c)	(d)	(e)
native words	no	no	no	no	no
loanwords	yes	yes	yes	yes	yes
mimetic words	yes	yes	yes	yes	no?

Final velars are usually not allowed in native words of modern Jinghpaw due to the sound change of PTB *k to a glottal stop in inherited words (Benedict 1972:14). Jinghpaw, after this sound change, imported final /k/ from neighboring languages, as in (16a), filling the structural gap in the native phonology once created by the sound change. Jinghpaw words with final /k/ are thus good candidates for loans (Matisoff 1974:157). Burmese /h/, a marginal sound restricted to interjections and mimetic words in the Jinghpaw native phonology, is sometimes straightforwardly maintained without substitution. Some items, as illustrated by (16b), show hesitation between /h/ and /kh/, the latter of which results from adaptation. Jinghpaw has a native phonotactic restriction

⁸ Examples include *cèk-cèk-càk-càk* ‘ticktack’, *hàm* ‘to yawn’, *wi-wi* ‘sound of blowing wind’, *ʔŋéʔ-ʔŋéʔ* ‘sound of heaving breathing’.

against combining an initial /w/ or /ŋ/ with front vowels that arose as a result of a sound change (Kurabe 2014a, 2014b). Such illicit combinations in the native phonology were imported into Jinghpaw during the course of borrowing, as in (16c). Jinghpaw also has a restriction against a sequence of /ŋ/ plus /ə/. The sequence, however, was imported into Jinghpaw, as given in (16d), as an outcome of language contact.

(16) Examples of importation

- a. ‘weapon’ Jg. *làknàk* (from WB *laknak*, MB *leʔneʔ*, Sh. *laak³naak³*)
- b. ‘preach’ Jg. *hó* ~ *khó* (from WB *ho*, MB *hó*, Sh. *hɔ⁴*)
- c. ‘spirit’ Jg. *wé.nyí* (from WB *wiññāññ*, MB *wèiŋpìN*, Sh. *wí⁵pen²*)
- d. ‘hell’ Jg. *ɲəráy* (from WB *ñarai*, MB *ɲǎyé*, Sh. *ɲaa⁴raaj⁴*)

Although Jinghpaw largely adopted Burmese inputs without any adaptation, it sometimes repaired foreign inputs in accordance with its native phonology. Burmese /h/ thus sometimes underwent an adaptation process, the fully nativized form of which is /kh/, as illustrated by (16b). Jinghpaw, as exemplified in (17), systematically adapted voiceless sonorants in Burmese (sometimes through Shan) as voiced counterparts, because its native phonology lacked them. Modern Jinghpaw speakers, although they possess full knowledge of Burmese phonology, even apply this repair strategy to insertions in code-switching. Burmese /hlâ/ ‘be beautiful’ is thus more likely to be pronounced /lâ/ by Jinghpaw speakers.

(17) Voicing of voiceless sonorants

- a. ‘certificate’ Jg. *lâkmàt* (from WB *lakmhat*, MB *leʔhmaʔ*, Sh. *laak³maat³*)
- b. ‘strike’ Jg. *nák* ~ *nàk* (from WB *nhak*, MB *hneʔ*, Sh. *naak³*)
- c. ‘offer’ Jg. *lu* (from WB *lhū*, MB *hlù*, Sh. *lu²*)

4 Conclusions

This paper, as a preliminary approximation toward studies in Burmese-Jinghpaw contact linguistics, provided a descriptive account of the phonological properties of Burmese loans in Jinghpaw especially focusing on their segmental phonology. Our findings indicated that Burmese loans in Jinghpaw often retain the phonological characteristics of WB, many of which underwent sound changes in MB. This situation is remarkable given that the intensive contact relationship between Burmese and Jinghpaw appears to be of relatively recent origin. This fact is due to borrowing chains, i.e. Burmese → Shan

→ Jinghpaw, where Shan, which has had well-established contact relationships with both Burmese and Jinghpaw from early stages, performed the function of transferring Burmese lexical items into Jinghpaw. Our findings also revealed that Jinghpaw possesses some Burmese loans that reflect MB phonology, which highlights the multistratal nature of Burmese loans in Jinghpaw. Sporadic irregularity in loans, together with suprasegmental and morphological correspondences between source and borrowing languages, need to be addressed in future studies.

Appendix A: Lexicon of Burmese loans

This appendix provides Burmese loans entered into Jinghpaw, together with loans of other source languages that filtered into Jinghpaw through Burmese. The remainder of this section is organized as follows. Section 0.1 presents loans of Burmese origin with WB and MB forms, and if any, with corresponding forms of Shan, by way of which many Burmese loans entered into Jinghpaw. Section 0.2 gives loans of Indic origin that found their way into Jinghpaw through Burmese (and Shan). These Indic loans are identified based on Myanmar Language Commission ed. (2009). Section 0.3 provides loans of other origin, especially English, many of which entered into Jinghpaw during the colonial period (1824 to 1948) presumably through Burmese (and Shan). This is suggested by the fact that Jinghpaw shares some peculiar properties of English loans with Burmese and Shan, such as the deaspiration of stops, e.g. WB *kā³* ‘car’, MB *ká*, Sh. *kaa⁴*, Jg. *ká*, and the mapping of English /f/ to /ph/, e.g. WB *phoŋtin* ‘fountain pen’, MB *phàuntìn*, Jg. *phoŋtin*.

Notes on the lexicon are as follows. The first column provides English translations for Jinghpaw words based on Hanson (1906) and Maran (1978). The second column offers Jinghpaw words in the orthographic forms followed by phonemic transcriptions enclosed in slashes. The third column gives corresponding forms of Burmese and other source languages, which are followed, if any, by corresponding forms from Shan.

0.1 Loans of Burmese origin

affair	ăye /ʔăye/	အရေꩻ WB <i>are³</i> , MB <i>ʔăyé</i> ; Sh. <i>ʔa¹je⁴</i>
age	āsak /ʔəsàk/	အသက် WB <i>asak</i> , MB <i>ʔəθɛʔ</i> ; Sh. <i>ʔa¹s^haak³</i>
amulet	lak hpoi /làkphóy/	လက်ဖွဲ့ WB <i>lakphwai¹</i> , MB <i>lɛʔphwɛ</i>

anticipate	htang /thàŋ/ ⁹	ထင် WB <i>than</i> ‘think’, MB <i>thìn</i> ; Sh. <i>t^haay²</i>
antique	lak hawng /lakhóŋ/	လက်ဟောင်း WB <i>lakhon³</i> , MB <i>le^hháuN</i>
apologize	tawng ban /tónban/	တောင်းပန် WB <i>ton³pan</i> , MB <i>táunbàn</i> ; Sh. <i>taŋ⁴paan²</i>
asafoetida ¹⁰	hkying hku /khyiŋkhu/	ရှိန်းခို WB <i>rhin³khui</i> , MB <i>céinkhò</i> ; Sh. <i>s^hiŋ⁴k^ho²</i>
auger	lun bu /lunbu/	လွန်ပူ WB <i>lwanpū</i> , MB <i>lùnbù</i>
ballot	me /me/	မဲ WB <i>mai</i> , MB <i>mé</i>
be closed	pyik /pyík/	ပိတ် WB <i>pit</i> , MB <i>pei?</i> ; Sh. <i>pik⁵</i>
be destroyed	byak /byák/ ~ byak /byàk/	ပျက် WB <i>pyak</i> , MB <i>pye?</i>
be deterred	a na /ana/ ~ āna /ʔəna/	အားနာ WB <i>ā³nā</i> , MB <i>ʔána</i> ; Sh. <i>ʔaa⁴naa²</i>
be important	āhkyak /ʔəkhyaŋ/	အချက် WB <i>akhyak</i> ‘point’, MB <i>ʔāche?</i> ; Sh. <i>ʔa¹k^hjaak³</i> ‘subject’
be lucky	htik /thìk/	ထိုက် WB <i>thuik</i> , MB <i>dai?</i>
bell	hkawng lawng /khonlon/ ~ hkālawng /khəlon/	ခေါင်းလောင်း WB <i>khon³lon³</i> , MB <i>kháunláun</i> ; Sh. <i>k^həŋ⁴lon⁴</i>
bottle ¹¹	pālin /pəlín/ ~ pāleng /pələŋ/	ပုလင်း WB <i>pulan³</i> , MB <i>pālín</i> ; Sh. <i>pa¹leŋ⁴</i>
bowl	jārunŋ /jərun/	ဇလုံ WB <i>jalun</i> , MB <i>zāloun</i> ; Sh. <i>tsa¹luŋ²</i>
bread ¹²	muk /mùk/ ¹³	မုန့် WB <i>mun¹</i> , MB <i>mōun</i>
bucket	ye bung /yebúŋ/	ရေပုံး WB <i>repun³</i> , MB <i>yèbóun</i> ; Sh. <i>puŋ⁴</i>
butter	htaw bat /thóbàt/	ထောပတ် WB <i>thopat</i> , MB <i>thóba?</i> ; Sh. <i>t^hə⁴paat³</i>
camphor	pāyuk /pəyúk/	ပရုတ် WB <i>parut</i> , MB <i>pəyou?</i> ; Sh. <i>pa¹ruk³</i>

⁹ This verb is used especially in Jinghpaw dialects distributed in northern Shan State, Burma.

¹⁰ ‘asafoetida, a wax-like extract of herbal plants, of strong odour used for medicinal purposes, especially of young children (the substance is patted to a round, thin, flat shape and then applied to the regions of the temporal lobes in order to bring down fever)’

¹¹ Also found in other Kachin languages, e.g. Lh. *pālín^H*, La. *pa rheing*”, Ng. *pvlín*, Ra. *bvlóng* ~ *bvlín*.

¹² Also widely found in other Kachin languages, e.g. Za. *muk¹*, Lh. *muk^H*, La. *mug*, Ra. *muk*.

¹³ The irregular final -k in Jinghpaw may reflect the falling or ‘creaky’ tone in Burmese which is articulated with a glottal constriction.

cannon ¹⁴	myawk /ʔəmyòk/	အမြောက် WB <i>amrok</i> , MB ʔəmyauʔ; Sh. ʔa ¹ mjòk ³
capital ¹⁵	arang /ʔáráŋ/	အရင်း WB <i>arain³</i> , MB ʔəyín; Sh. ʔa ¹ raaŋ ⁴
carpenter ¹⁶	lak sǎma /lǎksəmə/ ~ lǎsǎma /ləsəmə/	လက်သမား WB <i>laksamā³</i> , MB ləʔəǎmə; Sh. laak ³ s ^h a ¹ maa ⁴
catfish ¹⁷	ngǎchyawng /ŋəcoŋ/	ငါးကြောင့် WB <i>nǎ³kron³</i> , MB ŋǎjáun
catfish ¹⁸	ngǎmyin /ŋəmyín/	ငါးမြင်း WB <i>nǎ³mrañ³</i> , MB ŋǎmyín
certificate	lak mat /lǎkmət/	လက်မှတ် WB <i>lakmhāt</i> , MB ləʔhmaʔ; Sh. laak ³ maat ³
chief	sǎgyi /səgyí/	သူကြီး WB <i>sūkri³</i> , MB ǎǎjí
cigar	sǎlik /səlík/	ဆေးလိပ် WB <i>che³lip</i> , MB shéleiʔ; Sh. s ^h e ⁴ lik ⁵
city ¹⁹	myu /myúʔ/	မြို့ WB <i>mrui¹</i> , MB myô
class	tan /tán/	တန်း WB <i>tan³</i> , MB tán; Sh. taan ⁴
clerk ²⁰	chyǎre /cərə/ ~ tsǎri /tsəri/	စာရေး WB <i>cāre³</i> , MB sǎyé; Sh. tsa ¹ re ⁴
coconut ²¹	mǎ-un /mǎʔún/	အုန်း WB <i>un³</i> , MB ʔóun; Sh. maak ² ʔun ¹
contract ²²	buk pyat /bùkpyàt/	ပုတ်ပြတ် WB <i>putprat</i> , MB pouʔpyaʔ
copy (v.)	ku /kú/	ကူး WB <i>kū³</i> , MB kú; Sh. ku ⁴
cork	paw /po/	ဖော့ WB <i>pho¹ʔ</i> , ²³ MB phô; Sh. p ^h ɔ ⁵
custard	ap-aw za /ʔódza/	ကြော်ဇော WB <i>ojā</i> , MB ʔózá
ple ²⁴		
customs	kang /kàn/	ကင်း WB <i>kañ³</i> , ²⁵ MB kín; Sh. kaan ¹

¹⁴ Also found in other Kachin languages, e.g. Lh. *amyaung* (K), La. *amyoug*, Ng. *vmyauq*.

¹⁵ Also found in other Kachin languages, e.g. Za. *a¹rang³¹*, Lh. *arang* (K), La. *arang*”.

¹⁶ Also found in other Kachin languages, e.g. Lh. *lag sama* (K), La. *lag sama*”, Ra. *lvksvmá*.

¹⁷ ‘the long-headed catfish, *Mystus aor*’

¹⁸ ‘the short-headed catfish, *Danio nigrofasciatus*’

¹⁹ Also widely found in other Kachin languages, e.g. Za. *mvyuq⁵*, Lh. *myu*’ (K), La. *myu*, Ra. *myoq* ~ *myuq*.

²⁰ Also found in other Kachin languages, e.g. Lh. *cǎre^H*, La. *jiri*, Ra. *jeré*.

²¹ Also found in other Kachin languages, e.g. Lh. *ma-un* (K), La. *ma-un*, Ra. *mvwónshí*.

²² ‘a job or contract, where terms of payment are based on the entire contract’

²³ The irregular correspondence between unaspirated and aspirated stops obscures the relationship.

²⁴ Also found in other Kachin languages, e.g. Lh. *o*” *za*: (K), La. *o*” *za*, Ng. *ohza*.

²⁵ ‘outpost; post for collecting custom duties’

customs	kawk /kòk/	အကောက် WB <i>akok</i> , MB <i>?ăkau?</i> ; Sh. <i>?a¹kək³</i>
cutch ²⁶	sha ji /ɕájí/	ရှားစေး WB <i>rhā³ce³</i> , MB <i>ɕázé ~ ɕází</i> ; Sh. <i>s^haa⁴tse⁴</i>
dengue	tuk kui /túkkúy/	တုတ်ကွေး WB <i>tupkwe³</i> , MB <i>tou?kwé</i>
depository ²⁷	dek /dèk/	တိုက် WB <i>tuik</i> ‘bulilding’, MB <i>taí?</i> ; Sh. <i>trk³</i> ‘building; any depository’
deputy com-missioner	ăye bying /ʔəyébyiŋ/ ~ ăye byeng /ʔəyébyeŋ/	အရေးပိုင် WB <i>are³puin</i> , MB <i>?ăyébàin</i>
desk	săboi /səbóy/	စာပွဲ WB <i>cāpwai</i> , MB <i>zābwé</i>
detain	hkyuk /khyùk/	ချုပ် WB <i>khyup</i> , MB <i>chou?</i> ; Sh. <i>k^hjuk³</i>
detective	jum htawk /jùnthòk/	စုံထောက် WB <i>cuinthok</i> , MB <i>sòundau?</i> ; Sh. <i>tsuŋ²t^hək³</i>
disciple	săpe /səpé/	တပည့် WB <i>tapañ¹</i> , MB <i>dăbê ~ dăbjî</i> ; Sh. <i>ta¹pe⁴</i>
doctor	tsi sára wun /tsisərawùn/	ဆရာဝန် WB <i>charāwan</i> , MB <i>shəyəwùn</i> ; Sh. <i>s^hraa²wun²</i>
emerald	mya /mya/	မြ WB <i>mra</i> , MB <i>myâ</i> ; Sh. <i>mjaa⁵</i>
envelope	tsa ik /tsa?ik/	စာအိတ် WB <i>cā’it</i> , MB <i>sà?ei?</i>
epsom salts	săhka /səkhá/	ဆားခါး WB <i>chā³khā³</i> , MB <i>shəkhá</i>
era	lak htak /lăkthàk/	လက်ထက် WB <i>lakthak</i> , MB <i>le?the?</i> ; Sh. <i>laak³t^haak³</i>
event ²⁸	ăkyu âkyawng /ʔăkyúʔăkyóŋ/	အကြီးအကြောင်း WB <i>akrui³akroñ³</i> , MB <i>?ăcôʔăcáun</i>
explain	sang lang /sánláng/ ~ shang lang /ɕánláng/	ရှင်းလင်း WB <i>rhañ³lañ³</i> , MB <i>ɕínlín</i>
factory	jak rung /jàkrún/	စက်ရုံ WB <i>cakruñ³</i> , ²⁹ MB <i>seʔyóun</i>
favor	ăkyu /ʔăkyú/	အကျိုး WB <i>akyui³</i> , MB <i>?ăcô</i>

²⁶ Also found in other Kachin languages, e.g. Lh. *ca”jhi”* (K), La. *ca”jhi”*, Ra. *sházi*.

²⁷ Also found in other Kachin languages, e.g. Za. *se¹dyek¹*, Lh. *sadig* (K), Ra. *svdik*. This root, which is likely to be an old Chinese loan, is a widespread root shared by related and unrelated languages of Southeast Asia, such as Burmese, Mon and Thai (Jenny 2015:11–2). The same holds for ‘plow’ and ‘spoon’ below.

²⁸ ‘occurrences, affairs, events, the happenings, the drama, the action, the cause-and-effect of a situation, a state of affairs’

²⁹ The first syllable is ultimately from Pali (see Section 0.2 below).

feast	poi /póy/	ပွဲ WB <i>pwai</i> , MB <i>pwé</i> ; Sh. <i>pəj</i> ⁴
film	dat shin /dátçin/	ဓာတ်ရှင် WB <i>dhātrhañ</i> , MB <i>daʔçin</i>
firearm ³⁰	tung mi /tùŋmí/	တူမီးသေနတ် WB <i>tūmī</i> ³ <i>senat</i> , MB <i>tūmíθānaʔ</i>
fisherman	dam nga /dàmŋà/	တံငါ WB <i>taññā</i> , MB <i>təŋà</i> ; Sh. <i>tam²ŋaa³</i>
flag	dawng hkawn /dòŋkhon/ ³¹	တံခွန် WB <i>tañkhwan</i> ‘pennant’, MB <i>dăgun</i> ; Sh. <i>tam⁴khon²</i>
France	pyin tit /pyintít/	ပြင်သစ် WB <i>praisac</i> , MB <i>pyinθiʔ</i>
gain ³²	ămyat /ʔəmyàt/	အမြတ် WB <i>amrat</i> , MB <i>ʔămyaʔ</i> ; Sh. <i>mjaat</i> ³
gasoline	dat si /dát si/	ဓာတ်ဆီ WB <i>dhāčhī</i> , MB <i>daʔshī</i> ; Sh. <i>t^haat³s^hi²</i>
gecko	tau te /tawtéʔ/	တောက်တဲ့ WB <i>toktai¹</i> , MB <i>tauʔtê</i> ; Sh. <i>tək⁵tē⁵</i>
goal	ban dung /bandùŋ/	ပန်းတိုင် WB <i>pan³tuin</i> , MB <i>pándàin</i> ; Sh. <i>paan⁴tuŋ⁴</i>
goods for sale	gun /gùn/	ကုန် WB <i>kun</i> , MB <i>kòun</i> ; Sh. <i>kun²</i>
government ³³	ăsuya /ʔəsúyàʔ/	အစိုးရ WB <i>acui³ra</i> , MB <i>ʔăsóyá</i> ; Sh. <i>ʔa¹tso⁴jaa⁵</i>
guess	tak /tāk/	တွက် WB <i>twak</i> , MB <i>tweʔ</i> ; Sh. <i>tak⁵</i>
habit	ăkyang /ʔəkýáŋ/	အကျင့် WB <i>akyai¹</i> , MB <i>ʔăcîn</i> ; Sh. <i>ʔa¹kjaan⁵</i>
handcuffs	lak htik /lākthík/	လက်ထိတ် WB <i>lakthit</i> , MB <i>leʔtheiʔ</i>
herring	nga u hpe /ŋáʔùphe/	ငါးဖယ် WB <i>ñā³phay</i> , MB <i>ŋăphè</i>
hole	paw /pók/	အပေါက် WB <i>apok</i> , MB <i>ʔăpauʔ</i>
honor	ărawng /ʔəron/	အရောင် WB <i>aron</i> ‘color’, MB <i>ʔăyàun</i> ; Sh. <i>ʔa¹rəŋ²</i> ‘color, brightness’
hose	pyun /pyun/ ~ byawng /byóŋ/	ပြွန် WB <i>prwan</i> , MB <i>pyùn</i>

³⁰ ‘flintlock firearm, a gun that takes loose black power’³¹ The final velar nasal can be accounted for in terms of assimilation to the following syllable.³² Also widely found in other Kachin languages, e.g. Za. *myat¹*, Lh. *ʔămyat^F*, La. *amyaid* ~ *amyed*, Ng. *myat*, Ra. *myet*.³³ Also found in other Kachin languages, e.g. Lh. *ʔătsu^Hyaʔ^F*, La. *asu²ya*, Ng. *vsuya*, Ra. *súyaq* ~ *vsúyaq*.

hundred thou- sand ³⁴	sen /sèn/	သိန်း WB <i>sin</i> ³ , MB <i>θéin</i> ; Sh. <i>s^hen</i> ¹
hunter	muk hkyu /mùkkhyù/ ³⁵	မုဆိုး ~ မုတ်ဆိုး WB <i>muchui</i> ³ ~ <i>mutchui</i> ³ , MB <i>mouʔshó</i>
interest	ātu /ʔətú/	အတိုး WB <i>atui</i> ³ , MB <i>ʔătó</i> ; Sh. <i>ʔa¹to</i> ⁴
jail ³⁶	htawng /thon/	ထောင် WB <i>thoñ</i> , MB <i>thàun</i> ; Sh. <i>t^hɔŋ</i> ²
knock	hkaw /khòk/	ခေါက် WB <i>khok</i> , MB <i>khauʔ</i> ; Sh. <i>k^hɔk</i> ⁴
land (v.)	sek /sék/	ဆိုက် WB <i>chui</i> ³ , MB <i>shaiʔ</i>
large fish ³⁷	nga u bat /ŋáʔùbàt/	ငါးပတ် WB <i>ñā³pat</i> , MB <i>ŋǎbaʔ</i>
law ³⁸	tāra /tərá/	တရား WB <i>tarā³</i> , MB <i>tǎyá</i> ; Sh. <i>ta¹raa</i> ⁴
lime	htun /thun/	ထုံး WB <i>thuiñ</i> ³ , MB <i>thóun</i> ; Sh. <i>t^hun</i> ¹
lime box	htun bu /thunbu/	ထုံးဘူး WB <i>thuiñ³bhū³</i> , MB <i>thóunbú</i>
linen cloth	pik /pík/	ပိတ် WB <i>pit</i> , MB <i>peiʔ</i> ; Sh. <i>pik</i> ³
loan (v.)	boi /boy/	ပွဲစား WB <i>pwaicā³</i> ‘broker’, MB <i>pwézá</i> ; Sh. <i>poj⁴tsaa⁴</i> ‘broker’
magic	myaw le /myòklèʔ/	မျက်လှည့် WB <i>myaklhañ¹</i> , MB <i>myeʔhlê</i> ; Sh. <i>mjaak³le⁵</i>
mainspring of a watch	nayi tanbat /nayitanbàt/	နာရီသံပတ် WB <i>nārīsanipat</i> , MB <i>nàyiθànbāʔ</i>
manner	htung /thúŋ/	ထုံး WB <i>thuiñ</i> ³ , MB <i>tóun</i> ; Sh. <i>t^huŋ</i> ⁴
marquee ³⁹	bu de /budé/	ဗိုလ်တဲ WB <i>builtai</i> , MB <i>bòdé</i>
master	sāma /səmə/	သမား WB <i>samā³</i> , MB <i>θāmā</i>
measles	wak sak /wàksàk/	ဝက်သက် WB <i>waksak</i> , MB <i>wεʔθεʔ</i>
measure ⁴⁰	bye /bye/	ပဲ WB <i>pai</i> , MB <i>pé</i> ; Sh. <i>pε</i> ⁴
measure ⁴¹	dang /dàn/	တင်း WB <i>tañ³</i> , MB <i>tín</i> ; Sh. <i>taay</i> ¹

³⁴ Related numerals are widespread among Kachin languages, e.g. Lh. *sen*^F, La. *sen*, Ng. *dvsens*⁷, Ra. *sèn*.

³⁵ Numhpuk Singpho, a Jinghpaw dialect spoken in northeastern India, has a form more faithful to its input, i.e. *muksu* /muk³suu⁴/ ‘hunter’ (Morey 2007:25).

³⁶ Also widely found in other Kachin languages, e.g. Za. *tong*⁵⁵, Lh. *thaung*: (K), La. *thung*:, Ng. *tung*, Ra. *tung*.

³⁷ ‘a species of large fish of the suborder *Siluroidea*’

³⁸ Also found in other Kachin languages, e.g. Lh. *tāra*^H, La. *tarha*” ~ *tara*”, Ra. *dvrá*.

³⁹ ‘a marquee, a bungalow, a guest house, a tent or canopy set up for an exhibition or party, lit. a place for an officer to rest’

⁴⁰ ‘a unit of volume measurement (esp. of grain) equal to eight cups, 64 ounces, one-half gallon’

⁴¹ ‘a measure of volume or capacity roughly equal to a bushel’

messy	shuk /ɕúk/	ရှုပ် WB <i>rhup</i> , MB <i>ɕou?</i> ; Sh. <i>s^huk⁵</i>
messy ⁴²	suk sak /sùksàk/	ရှုပ်ရှုပ်ရှက်ရှက် WB <i>rhuprhuprhakrhak</i> , MB <i>ɕou?ɕou?ɕɛ?ɕɛ?</i> ; Sh. <i>s^huk⁵s^hak⁵</i>
mile	deng /deŋ/	တိုင် WB <i>tuin</i> ‘post’, ⁴³ MB <i>tàin</i>
model ⁴⁴	ăbung /ʔəbuŋ/ ~ âbum /ʔəbùm/	ပုံ WB <i>pum</i> , MB <i>pòun</i> ; Sh. <i>pum²</i>
money ⁴⁵	kye daw /kyédò/	ကြေး WB <i>kre³</i> ‘copper’, MB <i>cé ~ cí</i>
month	la /làʔ/	လ WB <i>la</i> , MB <i>lâ</i>
Murraya plant ⁴⁶	sănap hka /sənàpkhá/	သနပ်ခါး WB <i>sanapkhā³</i> , MB <i>θānăkhá</i> ; Sh. <i>s^ha¹naap³k^haa⁴</i>
new hand	lak set /laksèt/	လက်သစ် WB <i>laksac</i> , MB <i>lɛʔθi?</i> ; Sh. <i>laak³s^het³</i>
nosegay	pan hkye /pankhye/	ပန်းချည် WB <i>pan³khyañ</i> , MB <i>pánchì</i>
offer ⁴⁷	sak /sàk/	ဆက် WB <i>chak</i> , MB <i>she?</i> ; Sh. <i>s^haak³</i>
offer	lu /lu/	လှူ WB <i>lhū</i> , MB <i>hlù</i> ; Sh. <i>lu²</i>
offering ⁴⁸	alu /ʔàlu/	အလှူ WB <i>alhū</i> , MB <i>ʔāhlù</i>
office ⁴⁹	rung /ruŋ/	ရုံး WB <i>run³</i> , MB <i>yóun</i> ; Sh. <i>ruŋ⁴</i>
oil	ye nan /yenàn/	ရေနံ WB <i>renañ</i> , MB <i>yènnàn</i>
olive ⁵⁰	tsan lun /tsanlun/	သံလွင် WB <i>sañlwañ</i> , MB <i>θānlwìn</i> ; Sh. <i>maak²s^haan²lun²</i>
order	ăming /ʔəmîŋ/	အမိန့် WB <i>amin¹</i> , MB <i>ʔāmêin</i> ; Sh. <i>ʔa¹miŋ⁵</i>
other	dăhkya /dəkhya/	တခြား WB <i>takhrā³</i> , MB <i>dăjá</i>
pencil ⁵¹	hke dan /khédan/	ခဲတံ WB <i>khaitañ</i> , MB <i>khédàn</i> ; Sh. <i>k^hɛ⁴taan²</i>

⁴² Also found in other Kachin languages, e.g. Za. *suk¹suk¹sak¹sak¹*, Lh. *sug sag* (K), La. *sug sag*.

⁴³ ‘post, pillar, unit of measure for distance (one thousand *tà* or approximately two miles)’

⁴⁴ ‘a model, a pattern, or a template’

⁴⁵ ‘a sum of money paid as revenue or tax to the authorities concerned’

⁴⁶ Also found in other Kachin languages, e.g. Lh. *sanab kha*” (K), La. *sa naid kha*”, Ra. *dvnnakká*.

⁴⁷ ‘to offer, present respectfully, as a present to a chief’

⁴⁸ Also widely found in other Kachin languages, e.g. Lh. *alu*: (K), La. *alu*:, Ng. *vlu*, Ra. *vlu*.

⁴⁹ Also widely found in other Kachin languages, e.g. Za. *rung³¹*, Lh. *yur^H*, La. *yung*”, Ng. *yungh muh*, Ra. *róng*.

⁵⁰ Also widely found in other Kachin languages, e.g. Lh. *tsan: lun*: (K), La. *zhan loin*:, Ng. *tsanlun*, Ra. *zanlún*.

⁵¹ Found in other Kachin languages, e.g. Za. *kue³¹dan³⁵*, Lh. *khe^Htan^L*, La. *khe*” *tain*:, Ra. *kédan*.

petition (v.) ⁵²	shawk /ɕók/	လျှောက် WB <i>lhyok</i> , MB <i>ɕau?</i>
photograph	dat pung /dátpuŋ/	ဓာတ်ပုံ WB <i>dhātpuñ</i> , MB <i>daʔpòun</i> ; Sh. <i>tʰaat³puŋ²</i>
pickaxe	pawk tu /pòktú/	ပေါက်တူး WB <i>poktū³</i> , MB <i>pauʔtú</i>
plow (v.)	htai /thay/	ထယ် WB <i>thay</i> , MB <i>thè</i> ; Sh. <i>tʰaj¹</i>
power	dǎgu /dəgú/	တန်ခိုး WB <i>tankhui³</i> , MB <i>dǎgó</i> ; Sh. <i>tan⁴kʰo⁴</i>
preach ⁵³	hkaw /khó/ ~ haw /hó/	ဟော WB <i>ho</i> , MB <i>hó</i> ; Sh. <i>ho⁴</i>
present ⁵⁴	lak sawng /lǎksòŋ/	လက်ဆောင် WB <i>lakchoñ</i> ‘present’, MB <i>leʔshàun</i> ; Sh. <i>laak³sʰaŋ²</i> ‘present’
prince ⁵⁵	mang sa /mǎŋsá/	မင်းသား WB <i>mañ³sā³</i> , MB <i>mínθá</i> ; Sh. <i>maŋ⁴sʰaa⁴</i>
princess ⁵⁶	mang sǎmi /mǎŋsəmi/	မင်းသမီး WB <i>mañ³sam³</i> , MB <i>mínðǎmi</i>
provisions ⁵⁷	jǎrit /jərit/	စရိတ် WB <i>carit</i> , MB <i>zǎyeiʔ</i> ; Sh. <i>tsa¹rip³</i>
raft	hpawng /phoŋ/	ဖောင် WB <i>phoñ</i> , MB <i>phàun</i> ; Sh. <i>pʰaŋ²</i>
rank ⁵⁸	ǎya /ʔəya/	အရာ WB <i>arā</i> , MB <i>ʔǎyà</i> ; Sh. <i>ʔa¹jaa²</i>
read ⁵⁹	hpat /phàt/	ဖတ် WB <i>phat</i> , MB <i>phaʔ</i> ; Sh. <i>pʰat⁴</i>
recover ⁶⁰	sak sa /sáksà/	သက်သာ WB <i>saksā</i> , MB <i>θeʔθà</i> ; Sh. <i>sʰaak³sʰaa²</i>
rest ⁶¹	hkyam sa /khyámsà/	ချမ်းသာ WB <i>khyam³sā</i> ‘be rich’, MB <i>chánθà</i> ; Sh. <i>kʰjaam⁴sʰaa²</i>
robber ⁶²	dǎmya /dəmyàʔ/	ဓားပြ WB <i>dhā³pra</i> , MB <i>dǎmyā</i>
room ⁶³	hkan /khàn/	ခန်း WB <i>khan³</i> , MB <i>khán</i> ; Sh. <i>kʰaan⁴</i>

⁵² ‘to petition a court of justice, to sue, bring a law suit, to prosecute’

⁵³ Also found in other Kachin languages, e.g. Lh. *kho*” (K), La. *kho*”, Ra. *kó*.

⁵⁴ ‘property or money used as a bride’

⁵⁵ ‘the man who plays the part of the prince in a dramatic presentation, a dancer’

⁵⁶ ‘the woman who plays the part of a princess in a dramatic presentation, a dancer’

⁵⁷ ‘provisions for a journey, expenses while on the road’

⁵⁸ Also found in other Kachin languages, e.g. Lh. *ʔǎya^L*, La. *aya*: ~ *akhang*” *aya*:, Ng. *vya*, Ra. *ya* ~ *vya*.

⁵⁹ Used especially in Jinghpaw dialects spoken in northern parts of the Jinghpaw-speaking area.

⁶⁰ ‘to be relieved, to recover (e.g. as from sickness), to regain comfort’

⁶¹ ‘happiness, rest, pleasure, respite’

⁶² Also widely found in other Kachin languages, e.g. Za. *de¹myaq¹*, Lh. *damyā*, (K), La. *damyā*, Ra. *dvmyaq*.

⁶³ ‘a flat (an apartment), a room in a boarding house’

rupee ⁶⁴	kyap /kyàp/	ကျပ် WB <i>kyap</i> , MB <i>caʔ</i> ; Sh. <i>kjaap</i> ³
salary	la hka /làʔkhàʔ/	လခ WB <i>lakha</i> , MB <i>lâgâ</i>
satin	hpe /phé/	ဖဲ WB <i>phai</i> , MB <i>phé</i> ; Sh. <i>p^hé⁴</i>
school ⁶⁵	jawng /jòŋ/	ကျောင်း WB <i>kyoŋ</i> ³ , MB <i>cáun</i> ; Sh. <i>kjɔŋ</i> ⁴
screw	we wu /wéʔwu/	ဝက်အူ WB <i>wak'ū</i> , MB <i>wɛʔʔù</i> ; Sh. <i>waak³ʔu²</i>
sea ⁶⁶	pang lai /paŋlay/	ပင်လယ် WB <i>paŋlay</i> , MB <i>pìnlè</i> ; Sh. <i>paan²laaj²</i>
semi-divine being	ărawng /ʔəróŋ/	အလောင်း WB <i>aloŋ</i> ³ ‘corpse; Bodhisattva’, MB <i>ʔǎláun</i> ; Sh. <i>ʔa¹lɔŋ⁴</i>
shark	ngăman /ŋəmán/	ငါးမန်း WB <i>nǎ³man³</i> , MB <i>ŋəmán</i> ; Sh. <i>paa¹ŋa¹maan⁴</i>
shop ⁶⁷	seng /seŋ/	ဆိုင် WB <i>chuiŋ</i> , MB <i>shàin</i> ; Sh. <i>s^hɛŋ²</i>
spoon	zun /dzún/	ဇွန် WB <i>jwan</i> ³ , MB <i>zún</i>
stake (v.) ⁶⁸	lawng /lóŋ/	လောင်း WB <i>loŋ</i> ³ , MB <i>láun</i> ; Sh. <i>lɔŋ⁴</i>
stamp ⁶⁹	dăzik /dədzik/	တံဆိပ် WB <i>taŋchip</i> , MB <i>dăzeiʔ</i> ; Sh. <i>tan⁴s^hik³</i>
stew (v.)	chyaw /cól/	ကြော် WB <i>kro</i> ² , MB <i>cò</i> ; Sh. <i>tsɔ⁴</i>
strike (v.)	nak /nák/ ~ nak /nàk/	နှက် WB <i>nhak</i> , MB <i>hnɛʔ</i> ; Sh. <i>naak</i> ³
strugglingly	kuk kuk /kùkkùk/	ကုတ်ကုတ် WB <i>kutkut</i> , MB <i>kouʔkouʔ</i>
tax ⁷⁰	kawn /kòn/	အခွန် WB <i>akhwanʔ</i> , MB <i>ǎkhùn</i> ; Sh. <i>ʔa¹k^hɔn²</i>
teacher (f)	săra ma /səramáʔ/	ဆရာမ WB <i>charāma</i> , MB <i>shəyàmə</i>
teacher (m) ⁷¹	săra /səra/	ဆရာ WB <i>charā</i> , MB <i>shəyà</i> ; Sh. <i>s^hraa²</i>
telescope	man pyawng /manpyóŋ/	မှန်ပြောင်း WB <i>mhanproŋ</i> ³ , MB <i>hmànbyáun</i> ; Sh. <i>maan²pjɔŋ⁴</i>

⁶⁴ ‘kyat, Myanmar unit of money’⁶⁵ Also widely found in other Kachin languages, e.g. Za. *zyong*¹¹, Lh. *cuj^F*, La. *jung*, Ng. *jungs*, Ra. *zùŋg*.⁶⁶ Also found in other Kachin languages, e.g. Lh. *paŋ^Llay^L*, La. *pang: lai:*, Ra. *banglay*.⁶⁷ Found in other Kachin languages, e.g. Za. *sueng*⁵⁵, Lh. *seyⁿ^L*, La. *sain:*, Ng. *sen*, Ra. *sing*.⁶⁸ ‘to stake, wager, bet, as in gambling’⁶⁹ Also found in other Kachin languages, e.g. Lh. *tătsit^F*, La. *dazid*, Ra. *dvzøk*.⁷⁰ ‘a tax paid to a chief, esp. the thigh of any piece of large game caught by a villager’⁷¹ Also widely found in other Kachin languages, e.g. Za. *se^Lra³⁵*, Lh. *săra^L*, La. *sara:*, Ra. *svra*.

time	hkying /khyiŋ/ ~ ähkying /ʔəkhyiŋ/	အချိန် WB <i>akhyin</i> , MB <i>ʔächèin</i> ; Sh. <i>k^hiŋ</i> ²
torchlight ⁷²	dat mi /dátmi/	တတ်မီး WB <i>dhātmī</i> ³ , MB <i>daʔmí</i>
truly	āman /ʔəman/	အမှန် WB <i>amhan</i> , MB <i>ʔāhmàn</i>
tube ⁷³	pyawng /pyóŋ/	ပြောင်း WB <i>proi</i> ³ , MB <i>pyáun</i> ; Sh. <i>pjəŋ</i> ⁴
turmeric ⁷⁴	sānwi /sənúy/	နွင်း ~ စနွင်း WB <i>nanwañ</i> ³ ~ <i>canwañ</i> ³ , MB <i>nānwín</i> ~ <i>sānwín</i>
two-anna bit	mu /mu/	မူး WB <i>mū</i> ³ , MB <i>mú</i>
use (v.)	sung /súŋ/	သုံး WB <i>sun</i> ³ , MB <i>θóun</i> ; Sh. <i>s^huŋ</i> ⁴
usefulness	āsung /ʔəsúŋ/	အသုံး WB <i>asun</i> ³ , MB <i>ʔāθóun</i>
vessel ⁷⁵	kye dawk /kyédòk/	ကျည်တောက် WB <i>kyañtok</i> , MB <i>cidau</i> [?]
violin	daw raw /dòrò/	တရော ~ တယော WB <i>taro</i> ~ <i>tayo</i> , MB <i>täyó</i> ; Sh. <i>ta^lro</i> ⁴
washbowl	ang dung /ʔaŋduŋ/	အံတုံ WB <i>añtun</i> , MB <i>ʔindòun</i> ; Sh. <i>ʔaay</i> ²
water basin	ang /ʔaŋ/	အင် WB <i>añ</i> ‘tray’, MB <i>ʔin</i> ; Sh. <i>ʔaay</i> ²
weapon	lak nak /làknàk/	လက်နက် WB <i>laknak</i> , MB <i>leʔneʔ</i> ; Sh. <i>laak³naak³</i>
week ⁷⁶	bat /bàt/	ပတ် WB <i>pat</i> , MB <i>paʔ</i> ; Sh. <i>paat</i> ³
withdraw ⁷⁷	htuk /thùk/	ထုတ် WB <i>thut</i> , MB <i>thouʔ</i> ; Sh. <i>t^huk</i> ³
work	āmu /ʔəmu/	အမှု WB <i>amhu</i> ¹ ‘matter’, MB <i>ʔāhmû</i> ; Sh. <i>ʔa¹mu</i> ⁵
X-ray	dat man /dátman/	တတ်မှန် WB <i>dhātmhan</i> , MB <i>daʔhmàn</i> ; Sh. <i>t^haat³maan</i> ²
zinc	san pyaw /sanpyo/	သံဖြူ WB <i>sañphrū</i> , MB <i>θàñbyù</i>

0.2 Loans of Indic origin

almond ⁷⁸	bātan /bətan/	Hin. <i>bādām</i> ‘almond’ (from Per. <i>bādām</i>); ဗာဒီ WB <i>bādari</i> , MB <i>bātàn</i>
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⁷² Also found in other Kachin languages, e.g. Za. *dat⁵-mi¹¹* ~ *tat⁵-mi¹¹*, Lh. *dad’ mi*” (K), La. *daid mi*, Ra. *datmí*.

⁷³ ‘a tube, a pipe, a barrel (e.g. as of a gun)’

⁷⁴ Also found in other Kachin languages, e.g. Lh. *sanun*” (K), La. *sa noin*”, Ra. *svnvn*.

⁷⁵ ‘ordinary bamboo drinking vessel, made with a handle’

⁷⁶ Also found in other Kachin languages, e.g. Za. *bat^l*, Lh. *bad* (K), La. *bad*.

⁷⁷ ‘to draw, as a salary or money from a bank’

⁷⁸ Found in other Kachin languages, e.g. Lh. *ba: dan:* (K), La. *ba tain* ~ *ba tan*, Ng. *batan zains*.

betel	gang ze /gàŋzè/	P. <i>kamuka</i> ‘areca’; ကွမ်းသီး WB <i>kwam³sr³</i> ‘betel nut’, MB <i>kúnōí</i>
bless	mang gǎla /màngǎlə/	P. <i>maṅgala</i> ‘auspicious’; မင်္ဂလာ WB <i>maṅgalā</i> , MB <i>mìngǎlə</i> ; Sh. <i>maŋ²ka¹laa²</i>
brick	wut /wùt/	P. <i>it̥thakā</i> ‘burnt brick’; အုတ် WB <i>ut</i> , MB <i>ʔouʔ</i> ; Sh. <i>ʔut²</i>
brimstone	kan /kán/	Sk. <i>gandhaka</i> ‘brimstone’; ကန့် WB <i>kan¹</i> , MB <i>kân</i> ; Sh. <i>kaan⁵</i>
Buddha* ⁷⁹	hpǎra /phərá/	ဘုရား WB <i>bhurā³</i> , MB <i>phǎyá</i> ; Sh. <i>p^hraa⁴</i>
camel ⁸⁰	gawla-uk /golaʔúk/	P. <i>kula-ot̥tha</i> ; ⁸¹ ကုလားအုတ် WB <i>kulā³ut</i> , MB <i>kālāʔouʔ</i> ; Sh. <i>ka¹laa⁴ʔuk⁵</i>
causion ⁸²	sǎdi /sədìʔ/	P. <i>sati</i> ‘recognition’; သတိ WB <i>sati</i> , MB <i>ōǎdī</i> ; Sh. <i>s^ha¹ti⁵</i>
Ceylon	tihu /tihu/	P. <i>sīhaḷa</i> ‘Ceylon’; သီဟိုဠ် WB <i>sīhuiḷ</i> , MB <i>θihò</i> ; Sh. <i>s^hi²ho²</i>
clock ⁸³	nayi /nayi/	P. <i>nālī</i> ‘tube’, Hin. <i>nārī</i> ‘pulse’; နာရီ WB <i>nārī</i> , MB <i>nàyi</i> ; Sh. <i>naa²ri²</i>
coin	dengga /déŋgá/	Sk. <i>ṭaṅka</i> ‘stamped coin’; ဒင်္ဂား WB <i>daṅgā³</i> , MB <i>díngá</i> ; Sh. <i>teŋ⁴kaa⁴</i>
creator	sǎgya /səgyà/ ~ sǎhka /səkha/	Sk. <i>śakrá</i> ‘Indra’; သိကြား WB <i>sikrā³</i> ‘Indra’, ⁸⁴ MB <i>ōǎjá</i>
diamond	sin /sin/	P. <i>vajīra</i> ‘diamond’; စိန် WB <i>cin</i> , MB <i>sèin</i> ; Sh. <i>tsiŋ²</i>
element ⁸⁵	dat /dát/	P. <i>dhātu</i> ‘element’; ဓာတ် WB <i>dhāt</i> , MB <i>daʔ</i> ; Sh. <i>t^haat³</i>

⁷⁹ Items whose corresponding Indic forms are not identified are marked with asterisks.

⁸⁰ Also found in other Kachin languages, e.g. Lh. *ko^Lla^Lʔuk^F*, La. *goo: la: ug*, Ra. *golawu*.

⁸¹ WB *kulā³ut* (lit. Indian-camel), whose roots are not combined in the donor language, seems to be a novel compound coined in Burmese.

⁸² Also found in other Kachin languages, e.g. Lh. *sǎtiʔ^F*, La. *sa di*, Ra. *svdiq*.

⁸³ Also found in other Kachin languages, e.g. Za. *na³⁵i⁵⁵*, Lh. *na: yi:* (K), La. *na: yi:*, Ra. *nari*.

⁸⁴ ‘the Hindu god *Indra* which appears in Buddhist Scriptures as *Sakka*, the lord of the first and second levels of existence of the *nat devas*’

⁸⁵ ‘an element, constituent part, particle, member: the four grand elements, i.e. air, earth fire, water’

embroidery ⁸⁶	za /dza/	P. <i>jāla</i> ‘netting’, Hin. <i>jāl</i> ; 𑜋𑜧 WB <i>jā</i> , MB <i>zà</i> ; Sh. <i>tsaa</i> ²
figure	ruk /rùk/	P. <i>rūpa</i> ‘form’, Hin. <i>rūp</i> ; 𑜋𑜧 WB <i>rup</i> , MB <i>you?</i> ; Sh. <i>ruk</i> ³
foreigner	kāla /kəlá/	P. <i>kula</i> ‘family, clan’; 𑜋𑜧 WB <i>kulā</i> , MB <i>kəlá</i> ; Sh. <i>ka¹laa⁴</i>
glorious	hpung gam /phùŋgam/ ⁸⁷	P. <i>bhaga</i> ‘luck’, <i>kamma</i> ‘deed’; 𑜋𑜧 WB <i>bhun³kam̃</i> , MB <i>phóunkàn</i>
glory ⁸⁸	hpung /phúŋ/ ~ hpung /phuŋ/	P. <i>bhaga</i> ‘luck’; 𑜋𑜧 WB <i>bhun³</i> , MB <i>phóun</i> ; Sh. <i>p^huŋ⁴</i>
grace*	chyeju /céjú/	𑜋𑜧 WB <i>kye³jū³</i> , MB <i>cézú</i> ; Sh. <i>ke⁴tsu⁴</i>
greed	law hpa /lóphá/	P. <i>lobha</i> ‘greed’; 𑜋𑜧 WB <i>lobha</i> , MB <i>lóbā</i> ; Sh. <i>lo⁴p^haa⁵</i>
guaranty*	ama /ʔamáʔ/	𑜋𑜧 WB <i>āmakham̃</i> , MB <i>ʔamâkhàn</i> ; Sh. <i>ʔaa²maa⁵k^haam²</i>
guilt*	ăpyet /ʔəpyét/	𑜋𑜧 WB <i>aprac</i> , MB <i>ʔəpyi?</i> ; Sh. <i>ʔa¹pət³</i>
hell	ngărai /ŋəráy/	P. <i>niraya</i> ‘hell’; 𑜋𑜧 WB <i>ńarai</i> , MB <i>ŋăyê</i> ; Sh. <i>ŋaa⁴raaj⁴</i>
hundred mil- lion	gădi /gədi/	P. <i>koṭi</i> ‘the end’; 𑜋𑜧 WB <i>kuṭe</i> ‘ten million’, ⁸⁹ MB <i>gădè</i>
intellect	nyan /nyàn/	P. <i>ñāṇa</i> ‘knowledge’; 𑜋𑜧 WB <i>ñāṇ</i> , MB <i>ɲàn</i> ; Sh. <i>naan²</i>
jaggery	nam htan /nəmthan/	P. <i>tāla</i> ‘palmyra tree’; 𑜋𑜧 WB <i>than³</i> ‘toddy-palm’, MB <i>thán</i> ; Sh. <i>nam⁵t^haan¹</i>
jasper	năga htoi /nəgathòy/	P. <i>nāga</i> ‘serpent’; 𑜋𑜧 WB <i>nagā³swai¹</i> , MB <i>năgăθwê</i>
jewel	seng /seŋ/	P. <i>vajīra</i> ‘diamond’; 𑜋𑜧 WB <i>cin</i> ‘diamond’, MB <i>sèin</i> ; Sh. <i>s^het¹</i>

⁸⁶ Also found in other Kachin languages, e.g. Za. *za*³⁵, Lh. *tsa^L*, La. *za*.

⁸⁷ The final -ŋ can be accounted for in terms of progressive assimilation.

⁸⁸ Also found in other Kachin languages, e.g. Lh. *phung*” (K), La. *pung*”, Ng. *phunk*, Ra. *pùŋbàng* ~ *pòŋbàng*.

⁸⁹ All borrowed round numbers over hundred thousand in Jinghpaw exhibit semantic shifts (see Kurabe to appear).

law	u pa di /ʔúbədi/	P. <i>upadesa</i> ‘indication’; ဥပဒေ WB <i>upade</i> , MB <i>ʔúbədè</i> ; Sh. <i>u⁵pa⁵te²</i>
luck ⁹⁰	gam /gàm/	P. <i>kamma</i> ‘deed’; ကံ WB <i>kam̐</i> , MB <i>kàn</i> ; Sh. <i>kaam²</i>
machine ⁹¹	jak /jàk/	P. <i>cakka</i> ‘wheel’; စက် WB <i>cak</i> , MB <i>seʔ</i> ; Sh. <i>tsaak³</i>
mantra ⁹²	ga hta /gatha/	P. <i>gāthā</i> ‘verse’; ဂါထာ WB <i>gāthā</i> , MB <i>gāthà</i> ; Sh. <i>kaa²t^haa²</i>
mantra ⁹³	mandan /màndan/	P. <i>manta</i> ‘charm’; မန္တန် WB <i>mantan</i> , MB <i>màndàn</i> ; Sh. <i>maan²taan²</i>
merit	ku su /kúʔsu/	P. <i>kusala</i> ‘merit’; ကုသိုလ် WB <i>kusuil</i> , MB <i>kûðò</i> ; Sh. <i>ku⁵s^ho²</i>
mission work ⁹⁴	sasana /sasənà/	P. <i>sāsana</i> ‘teaching’; သာသနာ WB <i>sāsanā</i> ‘teaching’, MB <i>θàðǎnà</i> ; Sh. <i>s^haa²s^ha¹naa²</i>
monk ⁹⁵	hpung kyi /phùŋkyi/ ⁹⁶	P. <i>bhaga</i> ‘luck’; ဘုန်းကြီး WB <i>bhun³krī³</i> , MB <i>phóunjí</i>
nutmeg	za di hpu /dzadíʔphu/ ~ jadihpu /jadìphu/	P. <i>jāti puppha</i> ‘nutmeg’; ဇာဒိပိဋိလ် WB <i>jādipphuil</i> , MB <i>zàdeiʔphò</i> ; Sh. <i>tsaa²tí⁵p^ho²</i>
ocean ⁹⁷	nam muk dāra /nàmmùkdāra/ ⁹⁸	P. <i>samudda</i> ‘ocean’; သမုဒ္ဒရာ WB <i>samuddarā</i> , MB <i>θāmouʔdāya</i>
officer	bu /bu/	P. <i>bala</i> ‘power, army’; ဗိုလ် WB <i>buil</i> , MB <i>bò</i> ; Sh. <i>po²</i>

⁹⁰ Also found in other Kachin languages, e.g. Za. *gvyam¹¹*, Lh. *kam^F*, La. *gam*, Ra. *gàm*.

⁹¹ Also found in other Kachin languages, e.g. Za. *zyak¹*, Lh. *cak^F*, La. *jag*, Ra. *jvk*.

⁹² ‘magic spell or incantation, a verse or stanza of four lines each of which has eight syllables’

⁹³ Also found in other Kachin languages, e.g. Lh. *man: dan:* (K), La. *man tan*, Ng. *mandan*, Ra. *mandan*,

⁹⁴ Also found in other Kachin languages, e.g. Lh. *sa: sana:* (K), La. *sa: sana:*, Ra. *sasvna*.

⁹⁵ Also found in other Kachin languages, e.g. Za. *bung¹¹ki¹¹*, La. *phung gyi*, Ng. *bunggyis*, Ra. *pònggwì*.

⁹⁶ The second syllable is of Burmese origin, i.e. WB *krī³* ‘be big’.

⁹⁷ Also found in other Kachin languages, e.g. Za. *nam³¹moq¹de¹ra³⁵*, Lh. *nam mug dara:* (K), La. *nam mug dara:*, Ng. *nvmuk-dra*, Ra. *nvmukdvra*.

⁹⁸ The first syllable is of Shan origin, i.e. Shan *nam⁵* ‘water’.

officer	tha na up /thanaʔúp/ ⁹⁹	P. <i>thāna</i> ‘place’; ဌာနအုပ် WB <i>thānāʔup</i> , MB <i>thànàʔouʔ</i>
omen	nāmik /nəmìk/	P. <i>nimitta</i> ‘omen’; နိမိတ် WB <i>nimit</i> , MB <i>nāmeiʔ</i> ; Sh. <i>nr⁵mik³</i>
paisa ¹⁰⁰	pyek san /pyèksan/	Hin. <i>paisā</i> ‘copper coin’; ပိုက်ဆံ WB <i>puik-charṇ</i> , MB <i>paiʔshàn</i> ; Sh. <i>pək⁵-s^haan²</i>
period	gap /gàp/	P. <i>kappa</i> ‘fixed time’; ကပ် WB <i>kap</i> , MB <i>kaʔ</i> ; Sh. <i>kaap³</i>
policeman ¹⁰¹	pya da /pyada/	Hin. <i>pyādā</i> ‘messenger’ (from Per. <i>piyāda</i>); ပြာတာ WB <i>prātā</i> ‘messenger’, MB <i>pyàtà</i> ; Sh. <i>pjaa²taa²</i> ‘messenger’
punishment ¹⁰²	dam /dàm/ ~ dan /dan/	P. <i>daṇḍa</i> ‘stick as means of punishment’; ဒဏ် WB <i>daṇ</i> , MB <i>dàn</i> ; Sh. <i>taam²</i>
representative* ¹⁰³	amat /ʔàmàt/	အမတ် WB <i>amat</i> , MB <i>ʔəmaʔ</i> ; Sh. <i>ʔa¹maat³</i>
rheumatism*	du la /dula/	ဒုလ္လာ WB <i>dulā</i> , MB <i>dulà</i> ; Sh. <i>tu²laa²</i>
rich man ¹⁰⁴	sāhti /səthí/	P. <i>setṭhi</i> ‘treasurer’; သူဌေး WB <i>sūthe³</i> , ¹⁰⁵ MB <i>θāthé</i> ; Sh. <i>s^ha⁵t^he⁴</i>
ruby	bat dāmya /bàtdəmyà/	Sk. <i>padma-rāga</i> ‘ruby’; ပတ္တမြား WB <i>pattamrā³</i> , MB <i>bādāmyá</i> ; Sh. <i>pat³ta¹mjaa⁴</i>
saffron robe ¹⁰⁶	shang gan /çəŋgàn/	P. <i>sankāra-cola</i> ‘rag’; သင်္ကန်း WB <i>saṅkan³</i> , MB <i>θiŋgán</i> ; Sh. <i>s^haaŋ²kaan⁴</i>
sapphire ¹⁰⁷	ni la /nila/	P. <i>nīla</i> ‘blue’; နီလာ WB <i>nīlā</i> , MB <i>nìlā</i> ; Sh. <i>ni²laa²</i>
ship; papa-ya* ¹⁰⁸	sanghpaw /sáŋphó/	သင်္ဘော WB <i>saṁbho</i> , MB <i>θínbó</i> ; Sh. <i>maak²s^haaŋ⁴p^hᵛ⁴</i>

⁹⁹ The second syllable is of Burmese origin, i.e. WB *up* ‘to cover’.

¹⁰⁰ ‘a pice or *paisa*, the small unit of currency under the British’

¹⁰¹ Also found in other Kachin languages, e.g. Lh. *pya^Lta^L*, La. *pya: da:*, Ng. *pyada*, Ra. *byadā*.

¹⁰² Also found in other Kachin languages, e.g. Lh. *dan* (K), La. *dam*, Ra. *dvm zí*.

¹⁰³ ‘a representative of the people elected to the state council, national parliament, or some assembly’

¹⁰⁴ Also found in other Kachin languages, e.g. Lh. *sāthe^H*, La. *sa the[”] ~ sa thi[”]*, Ra. *svté*.

¹⁰⁵ The first syllable of Pali *setṭhi* that does not convey any meaning is replaced by *sū* ‘person’ in Burmese as a result of folk etymology.

¹⁰⁶ ‘the saffron robe of a Buddhist priest’

¹⁰⁷ Also found in other Kachin languages, e.g. Lh. *ni: la:*, La. *ni: la:*, Ng. *nila luk*.

¹⁰⁸ Also found in other Kachin languages, e.g. Za. *sang³¹po³¹*, Lh. *saŋ^Fpho^F*, La. *sang phoo[”]*, Ng.

sin	yu bak /yùbàk/	P. <i>upaddava</i> ‘misfortune’; ဥပဒ် WB <i>upad</i> , MB <i>ʔùbaʔ</i> ; Sh. <i>wi⁵paak³</i>
socks ¹⁰⁹	maw za /moza/	Hin. <i>mozā</i> ‘sock’ (from Per. <i>moza</i>); မော် ဇာ WB <i>mo²jā</i> , MB <i>mòzà</i>
spirit	hpuk /phùk/ ¹¹⁰	P. <i>bhūta</i> ‘ghost’; ဘုတ် ~ ဖုတ် WB <i>bhut</i> ~ <i>phut</i> , MB <i>phouʔ</i> ; Sh. <i>p^huk⁵</i>
spirit	we nyi /wényi/	P. <i>vinñāṇa</i> ‘mind’; ဝိညာဉ်, WB <i>winñāñ</i> , MB <i>wèinjìn</i> ; Sh. <i>wi⁵jen²</i>
state ¹¹¹	jat /jàt/	P. <i>jāti</i> ‘rebirth’, <i>jātaka</i> ‘birth story’; ဇာတ် WB <i>jāt</i> , MB <i>zaʔ</i> ; Sh. <i>tsaat³</i>
topaz*	u tǎphāya /ʔutəphəya/	ဥသာဖရား WB <i>usāpharā³</i> , MB <i>ʔouʔəphāyá</i>
unhappiness	duk hka /dùkkhàʔ/	P. <i>dukkha</i> ‘unpleasant’; ဒုက္ခ WB <i>dukkha</i> , MB <i>douʔkhā</i> ; Sh. <i>tuk⁵k^haa⁵</i>
university	dakkāsu /dàkkəsú/	P. <i>takkasilā</i> ‘Taxila’; ¹¹² တက္ကသိုလ် WB <i>takkasuil</i> , MB <i>teʔkǎθò</i> ; Sh. <i>tak⁵ka¹s^ho²</i>
water festival	shang gyen /cánggyen/	Sk. <i>saṃ-krānti</i> ‘Sankranti’; သင်္ကြန် WB <i>sañkran</i> , MB <i>θínjàn</i> ~ <i>ðǎjàn</i> ; Sh. <i>s^haag⁴-kjaan²</i>
wheat	jung /juŋ/	Hin. <i>gehūm</i> ‘wheat’; ဂျုံ WB <i>gyum</i> , MB <i>jòun</i> ; Sh. <i>cuj²</i>
wisdom	byeng ya /byèŋyà/	P. <i>paññā</i> ‘of wisdom’; ဝဉ္ဇာ WB <i>paññā</i> , MB <i>pyìnjà</i> ; Sh. <i>pij²paa²</i>
witness ¹¹³	sak se /sàksè/	Sk. <i>sākshin</i> ‘witness’; သက်သေ WB <i>sakse</i> , MB <i>θeʔθè</i> ; Sh. <i>s^haak³s^he²</i>

sang-pho, Ra. *sàngpò*.

¹⁰⁹ This item, which appears to have entered Burmese during the colonial period, is rarely known by modern Burmese speakers, but words derived from the same etymon is retained in minority languages as in Jinghpaw and other Kachin languages, e.g. Za. *mo³⁵-za³⁵*, Lh. *mo^Ltsa^L*, La. *moo*: *za*;, Ra. *moza*, and Chin languages as in Tedim Chin *mawza* and Mizo *mawza tawi* (Dr. Kosei Otsuka, p.c., 2016).

¹¹⁰ ‘a *nat* that has the power to take possession of a corpse and appear in the apparently living body of a deceased person, a zombie’

¹¹¹ ‘state of existence, of which there are three divisions past, present, and future’

¹¹² ‘a town situated in present-day Pakistan considered to be one of the earliest universities’

¹¹³ Also found in other Kachin languages, e.g. Lh. *sag se*: (K), La. *sag se*;, Ra. *svkse* ~ *shvkse*.

0.3 Loans of English and other origin

ball ¹¹⁴	baw lung /bòlúŋ/	En. <i>ball</i> ; ဘောလုံး WB <i>bholuín</i> ³ , MB <i>bólóun</i> ; Sh. <i>pɔ²luŋ</i> ⁴
bomb ¹¹⁵	bawm /bòm/	En. <i>bomb</i> ; ဗုံး WB <i>buiñ</i> ³ , MB <i>bóun</i> ; Sh. <i>maak²pəm</i> ⁴
camera ¹¹⁶	kemmara /kemməra/	En. <i>camera</i> ; ကင်မရာ WB <i>kaiṁmarā</i> , MB <i>kìnmǎrà</i> ; Sh. <i>kaa²ma¹raa²</i>
car	ka /ká/	En. <i>car</i> ; ကား WB <i>kā³</i> , MB <i>ká</i> ; Sh. <i>kaa⁴</i>
car ¹¹⁷	mawdaw /modo/	En. <i>motor</i> ; မော်တော် WB <i>mo²to²</i> ‘motorboat’, MB <i>mòtò</i>
car	mawdaw ka /modoká/	En. <i>motorcar</i> ; မော်တော်ကား WB <i>mo²to²kā³</i> , MB <i>mòtòká</i> ; Sh. <i>mo²to²kaa⁴</i>
Christ ¹¹⁸	hkri sǎdu /khrísǎdù/	En. <i>Christ</i> ; ခရစ်တော် WB <i>kharacto²</i> , MB <i>khǎri?tò</i> ; Sh. <i>k^ha¹rit³</i>
Christmas ¹¹⁹	hkri sǎmat /khrísǎmát/	En. <i>Christmas</i> ; ခရစ္စမတ် WB <i>kharacca-mat</i> , MB <i>khǎri?sǎma?</i>
college	kaw lik /kólík/	En. <i>college</i> ; ကောလိပ် WB <i>kolip</i> , MB <i>lóléi?</i>
company ¹²⁰	gung māni /guŋməni/	En. <i>company</i> ; ကုမ္ပဏီ WB <i>kumpanī</i> , MB <i>kòunbǎni</i> ; Sh. <i>kuŋ²pa¹ni²</i>
England ¹²¹	Inggǎlan /ʔiŋgǎlan/	En. <i>England</i> ; အင်္ဂလန် WB <i>aŋgalan</i> , MB <i>ʔiŋgǎlàn</i> ; Sh. <i>ʔiŋ²ka¹lan²</i>
English ¹²²	inglik /ʔiŋlík/ ~ inggǎlik /ʔiŋgǎlik/	En. <i>English</i> ; အင်္ဂလိပ် WB <i>aŋgalip</i> , MB <i>ʔiŋgǎlei?</i> ; Sh. <i>ʔiŋ⁴ka¹let³</i>
fit	htuk /thúk/	Mon <i>theik</i> ; ထိုက် WB <i>thuik</i> , MB <i>thai?</i> ; Sh. <i>t^huk²</i>

¹¹⁴ Also found in other Kachin languages, e.g. Za. *bo¹¹lung³¹*, Lh. *bo: lung*” (K), La. *boo: lung*”, Ra. *bòlúŋ*.

¹¹⁵ Also found in other Kachin languages, e.g. Lh. *bom*, La. *boem*, Ra. *bòm* ~ *bùm*.

¹¹⁶ Also found in other Kachin languages, e.g. Lh. *kem^Lra^L*, La. *kem ra*; Ra. *kemvra*.

¹¹⁷ Found in other Kachin languages, e.g. Za. *mo³⁵to³⁵* ~ *to³⁵*, Lh. *mo^Lto^L*, La. *moo doo*, Ra. *modo*.

¹¹⁸ Also found in other Kachin languages, e.g. Lh. *khye*” *stu*., La. *khri sa du*, Ra. *kristuq*.

¹¹⁹ Also found in other Kachin languages, e.g. Lh. *khye*” *smad*, La. *khri sa mad*, Ra. *kristmat*.

¹²⁰ Also found in other Kachin languages, e.g. Lh. *gung: mani*., La. *gung ma ni*., Ra. *gungbvni*.

¹²¹ Also found in other Kachin languages, e.g. Lh. *In ga lan*., La. *in ga lan*, Ra. *inggvlan*.

¹²² Also found in other Kachin languages, e.g. Lh. *In ga lid*, La. *in ga lid*, Ra. *engvlik*.

fort ¹²³	dap /dàp/	Mon <i>dap</i> ; တပ် WB <i>tap</i> , MB <i>taʔ</i> ; Sh. <i>tap</i> ⁵
fountain pen	hpawng tin /phoŋtin/	En. <i>fountain</i> ; ဖောင်တိန် WB <i>phoŋtin</i> , MB <i>phàuntin</i>
furlong	hpa lung /phaluŋ/	En. <i>furlong</i> ; ဖာလုံ WB <i>phālun</i> , MB <i>phàloun</i>
grape ¹²⁴	tsäbyi /tsəbyiʔ/	Arb. <i>zabīb</i> ‘raisin’; စပျစ် WB <i>capyac</i> , MB <i>zäbyiʔ</i> ; Sh. <i>tsa¹pit³</i>
guava ¹²⁵	mäli ga /məliɡa/	Malay <i>Melaka</i> ‘Malacca’; မာလကာ WB <i>mālagā</i> , MB <i>mālāgà</i> ; Sh. <i>maak²kaa²</i>
gun	sānat /sənat/	Por. <i>espinharda</i> ; ¹²⁶ သေနတ် WB <i>senat</i> , MB <i>θānaʔ</i>
Jesus ¹²⁷	Yesu /yesúʔ/	En. <i>Yes</i> ; ယေရှု WB <i>yerhu</i> , MB <i>yèçû</i> ; Sh. <i>je²s^hu⁵</i>
lottery ¹²⁸	hti /thi/	En. <i>lottery</i> ; ထိ WB <i>thī</i> , MB <i>thi</i> ; Sh. <i>t^hi²</i>
magazine	mekgāzin /mékɡədʒín/	En. <i>magazine</i> ; မဂ္ဂဇင်း WB <i>maggajañ³</i> , MB <i>mɛʔɡəzín</i> ; Sh. <i>mek³ka¹tsin⁴</i>
mile	mai /may/	En. <i>mile</i> ; မိုင် WB <i>muin</i> , MB <i>màin</i> ; Sh. <i>mɛɪ²</i>
minute ¹²⁹	mānit /mənit/	En. <i>minute</i> ; မိနစ် WB <i>minac</i> , MB <i>miniʔ</i>
motorcycle	mawdaw saike /modo-sayke/	En. <i>motorcycle</i> ; မော်တော်ဆိုင်ကယ် WB <i>mo²to²chuiŋkay</i> , MB <i>mòtòshàinkè</i> ; Sh. <i>mo²to²tsaaj²ky²</i>
number ¹³⁰	nambat /námbát/	En. <i>number</i> ; နံပါတ် WB <i>naipāt</i> , MB <i>nànbaʔ</i>

¹²³ Also found in other Kachin languages, e.g. Lh. *kye^Ftap^F*, La. *gye: dab*, Ng. *jesdvp*, Ra. *dap*.

¹²⁴ Also found in other Kachin languages, e.g. Lh. *sabyiʔ*, La. *za byiʔ*, Ng. *zvbiq*.

¹²⁵ Also found in other Kachin languages, e.g. Lh. *ma: laga:*, La. *ma: laga*, Ra. *malvgashí*.

¹²⁶ This widespread root, which found its way into many other Tibeto-Burman, Mon-Khmer and Tai languages, ultimately has its source in a slang of Portuguese soldiers in the 16th century, i.e. *espinharda* ‘musket’ (Matisoff 1988:747). The Burmese form appears to have a direct connection with Dutch *snaphaan* (Myanmar Language Commission ed. 2009:500).

¹²⁷ Also found in other Kachin languages, e.g. Lh. *Ye: suʔ*, La. *Ye su*, Ra. *yesu*.

¹²⁸ Also found in other Kachin languages, e.g. Lh. *thi:*, La. *thi:*, Ra. *ti*.

¹²⁹ Also found in other Kachin languages, e.g. Lh. *mi^Fnūt^F*, La. *myi: nid*, Ra. *minət ~ mvnit*.

¹³⁰ Also found in other Kachin languages, e.g. Za. *nam³⁵bat⁵*, Lh. *nam: bad* (K), La. *nam bed*, Ra. *nvmvbt*.

party	pati /pati/	En. <i>party</i> ; ပါတီ WB <i>pātī</i> , MB <i>pàti</i> ; Sh. <i>paa²ti²</i>
pawn	pawng /poŋ/	En. <i>pawn</i> ; ပေါင် WB <i>poiŋ</i> , MB <i>pàun</i> ; Sh. <i>poŋ²</i>
radio	rediyu /rediyu/	En. <i>radio</i> ; ရေဒီယို WB <i>redīyui</i> , MB <i>redijo</i> ; Sh. <i>re²ti²jo²</i>
second	tsekkan /tsèkkan/	En. <i>second</i> ; စက္ကန့် WB <i>cakkan¹</i> , MB <i>se²kân</i>
soap ¹³¹	sap bya /sápbya/ ~ sa bya /sàbyà/ ~ sàbya /səbya/	Por. <i>sabão</i> ; ဆပ်ပြာ WB <i>chapprā</i> , MB <i>sha²pyà</i> ; Sh. <i>s^hap⁵pjaa²</i>
soup	sup /súp/	En. <i>soup</i> ; စွပ်ပြုတ် WB <i>cwapprut</i> , ¹³² MB <i>su²pyou²</i>
stylus*	gănyit /gənyit/	ကညစ် WB <i>kaññac</i> , ¹³³ MB <i>kăpi²</i>
tamarind	măgyeng /məgyêŋ/	Mon <i>mañglan</i> ; မန်ကျည်း WB <i>mankyañ³</i> , MB <i>məjī</i> ; Sh. <i>maak²keŋ⁴</i>
velvet	gădi ba /gədiba/	Arb. <i>qatifa</i> ; ကတ္တီပါ WB <i>kattīpā</i> , MB <i>gădibà</i> ; Sh. <i>kat³ti³paa²</i>
whale	we la nga /weláŋgá/	En. <i>whale</i> ; ဝေလငါး WB <i>welañā³</i> , MB <i>wèlâŋá</i>

Appendix B: Semantics of Burmese loans

Burmese loanwords, as exemplified in (1), sometimes underwent semantic changes in Jinghpaw, illustrating such changes as specialization, generalization, and melioration.

(1) Examples of semantic shifts between Burmese and Jinghpaw

- WB *lakchoñ* ‘gift’ > Jg. *lăksòŋ* ‘property or money used as a bride’
- WB *tañkhwan* ‘pennant’ > Jg. *dòŋkhon* ‘flag’
- WB *aron* ‘color’ > Jg. *ʔəroŋ* ‘honor’
- WB *prātā* ‘messenger’ > Jg. *pyada* ‘police officer’
- WB *kañ³* ‘post for collecting custom duties’ > Jg. *kàŋ* ‘custom duties’

¹³¹ Also found in other Kachin languages, e.g. Za. *bya¹¹* ~ *sa¹¹-bya¹¹*, La. *sa²pya*; Ng. *sapyá*, Ra. *sapbyá*. This item, ultimately derived from an etymon of Proto-Indo-European, was adopted by a massive number of genetically related and unrelated languages across Europe, Africa, the Middle East, South, East and Southeast Asia, the Pacific, and Northe America (see Bauer 1992).

¹³² The second syllable is of Burmese origin, expressing ‘to boil’.

¹³³ From Mon according to Myanmar Language Commission ed. (2009:2).

- f. WB *khyam³sā* ‘be rich; have peace and quiet’ > Jg. *khyámsà* ‘to rest; be cheap’
 g. WB *sāsanā* ‘teaching’ > Jg. *sasənà* ‘mission work’

WB *lakchoñ* ‘gift’ (cf. Shan *laak³s^hɔŋ²* ‘gift’), narrowing its range of referent, is specialized to mean ‘property or money used as a bride’ in Jinghpaw. WB *tañkhwan* ‘pennant’ (cf. Shan *tam⁴khon²* ‘flag offered in worship’), on the other hand, is generalized to encompass any kinds of flags in Jinghpaw. WB *aroñ* ‘color’ (cf. Shan *ʔa¹rɔŋ²* ‘color, brightness’) underwent melioration in Jinghpaw, gaining a more positive sense of ‘honor’. A similar shift can also be observed in WB *prātā* (ultimately from Persian through Hindi) ‘office boy; messenger’ (cf. Shan *pjaa²taa²* ‘peon; messenger’), which is borrowed into Jinghpaw first with the meaning of ‘police force serving as the chief’s messengers’¹³⁴ and then with the meaning of ‘police officer’ in general today. Jinghpaw *kàŋ* ‘duties’, having its diachronic source in WB *kañ³* ‘post for collecting custom duties’, illustrates metonymic transfer. WB *khyam³sā* ‘be rich; have peace and quiet’ is introduced through Shan (i.e. *k^hjaam⁴s^haa²* ‘be at ease; ease’) into Jinghpaw, where it underwent further semantic shift meaning not only ‘happiness, rest, pleasure’ but also ‘be cheap, inexpensive’. As the majority of the Jinghpaw people today are Christian, Buddhism terminology such as WB *sāsanā* ‘teaching, dispensation’ (cf. Shan *s^haa²s^ha¹naa²* ‘religious system’; ultimately from Pali) is adopted by Jinghpaw as terminology of Christianity (i.e. Jg. *sasənà* ‘mission work’).

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¹³⁴ “[A]ll gumrawng gumsa chiefs maintain a regular police force serving as the chief’s messengers or agents of law enforcement” (Maran 1964:39).

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ジンポー語におけるビルマ語借用語音韻論

倉部 慶太

要旨

本稿の目的は、ジンポー語のビルマ語借用語を対象に、特に分節音に注目しながら、その借用語音韻論の記述的説明を行うことにある。本稿は、複雑な文化接触地域を成す東南アジアにおける言語接触の一つの事例を提供する。ジンポー語のビルマ語借用語音韻論は特に次の2点で注目に値する。第一に、ビルマ語とジンポー語の言語接触の歴史は比較的新しいにも関わらず、ジンポー語のビルマ語借用語の多くは現代ビルマ語で失われた保守的な音特徴を示す点である。この事実は、ビルマ語→シャン語→ジンポー語という語族を超えた借用の連鎖を想定することにより説明可能となる。すなわち、ビルマ語ともジンポー語とも長い接触の歴史を持つシャン語を介して、多くのビルマ語がジンポー語に導入されたのである。第二に、ジンポー語のビルマ語借用語が、古いビルマ語と現代ビルマ語の両方の音特徴を示す点である。この事実は、ジンポー語のビルマ語借用語が多層的性質を持つことを示す。附録 A ではビルマ語借用語語彙を提示し、附録 B ではビルマ語借用語に観察される音変化の記述を行う。

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