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What defines Qiang-ness: A look from Southern Qiangic languages*

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Abstract: In this paper, I study the empirical validity of the hypothesis of “Qiangic” as a subgroup of Sino-Tibetan, that is, the hypothesis of a common origin of thirteen little-studied languages of South-West China. This study is based on ongoing work on four Qiangic languages spoken in one locality (Mùlǐ Tibetan Autonomous County, Sìchūān), and seen in the context of languages of the neighboring genetic subgroups (Yí, Na, Tibetan, Sinitic). Preliminary results of documentation work cast doubt on the validity of Qiangic as a genetic unit, and suggest instead that features presently seen as probative of the membership in this subgroup are rather the result of diffusion across genetic boundaries. I furthermore argue that the four local languages currently labeled Qiangic are highly distinct and not likely to be closely genetically related. Subsequently, I discuss Qiangic as an areal grouping in terms of its defining characteristics, as well as possible hypotheses pertaining to the genetic affiliation of its member languages currently labeled Qiangic. I conclude with some reflections on the issue of subgrouping in the Qiangic context and in Sino-Tibetan at large.

1. Introduction

This paper examines the empirical validity of the Qiangic subgrouping hypothesis, as studied in the framework of the project “What defines Qiang-ness: Towards a phylogenetic assessment of the Southern Qiangic languages of Mùlǐ”.¹ The project focuses on three Southern Qiangic languages (Shíxīng, Lìzú [a.k.a. Ěrsū], Nàmùzī [a.k.a. Nàmùyī]) and on one Northern Qiangic language (Púmǐ [a.k.a. Prinmi]), as spoken in Mùlǐ Tibetan Autonomous County, Sìchūān Province, People’s Republic of China.²

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¹ This four-year project was launched in 2007. The principal investigators include Katia Chirkova, Guillaume Jacques, and Alexis Michaud. We work in collaboration with Lǐ Lán 李藍 of the Institute of Linguistics, Chinese Academy of Social Sciences, and Caroline Weckerle and Franz Hüber of the Institut für Systematische Botanik und Botanischer Garten, University of Zürich. Senior consultants of the project are Jackson T.-S. Sun of Academia Sinica, and Huáng Xíng 黃行 and Sūn Hóngkāi 孫宏開 of the Institute of Ethnology and Anthropology, Chinese Academy of Social Sciences. For a detailed description of the project, see <http://crlao.ehess.fr/document.php?id=490>.

² Mùlǐ Tibetan Autonomous County 木里藏族自治州, Written Tibetan (WT) *mu li rang skyong rdzong*. This county is part of Liángshān Yí Autonomous Prefecture 涼山彝族自治州 in Sìchūān Province, People’s Republic of China.

The Púmǐ dialect of Mùlǐ is spoken in the central part of the county. Púmǐ is the language of the ethnic majority of Mùlǐ and a local lingua franca. Púmǐ is further spoken in the neighboring Yányuán 鹽源

These languages are studied in the context of the local Tibetan dialect (Kami Tibetan), the local Chinese dialect (South-Western Mandarin), and the local Na languages (with a special focus on the little-studied Laze language).³ The goals of the project are: (1) in-depth documentation of the selected languages; and on that basis (2) reflection on the validity of the Qiangic as a phylogenetic unit (i.e. stressing genetic relationship and common inheritance over surface similarities) and as a monophyletic unit (i.e. assuming a single common ancestor for all subgroup languages).

The paper is organized as follows. Section 1.1 provides a brief overview of the essential features and challenges of the Qiangic hypothesis (Qiangic as a genetic unit). Section 2 summarizes the first results of documentation work. It essentially focuses on the synchronic similarities observed between the languages under study. Based on these data, I argue that features presently held as probative of membership in the Qiangic subgroup are rather indicative of a linguistic area, as these features are also found in the local varieties of the languages of other genetic subgroups (e.g. the local Tibetan dialect) and are absent from their nearest relatives outside of the area. Given that the reason for salient similarities shared by the languages of Mùlǐ is demonstrably due to diffusion across genetic boundaries, I furthermore argue that, contrary to the received view, the four local languages, currently labeled Qiangic, are highly distinct and not likely to be

and Jiǔlóng 九龍 Counties (Sichuān), as well as in Lánpíng 蘭坪, Nínglàng 寧蒗, Yǒngshèng 永勝, Lìjiāng 麗江, Yúnxian 雲縣, Wéixī 維西 Counties, all in Yúnnán Province.

Lizu, spoken in Kǎlā 卡拉 and Luǒbō 裸波 townships of Mùlǐ, is held to be the western dialect of the Ěrsū language. I refer to it by the autonym of the local group as Lizu, as preferred by my language consultants, for whom the name “Ersu” is reserved to the local Moso people. This language is further spoken in Gānlò 甘洛 and Yuèxī 越西 Counties of Liángshān Prefecture, as well as in Gānzī *dkar mdzes* 甘孜 Tibetan Autonomous Region and Yǎ’ān 雅安 District, all in Sìchuān Province.

Nàmùzī is the local Mùlǐ autonym of the group, whose language is known in the linguistic literature as Nàmùyī. Nàmùzī is spoken in Luǒbō township of Mùlǐ, as well as in Miǎnníng 冕寧 County (which, according to my language consultants, is the historical center of the Nàmùzī community), Xīchāng 西昌, Yányuán 鹽源 and Jiǔlóng Counties, all in Sìchuān Province.

Finally, Shíxīng is spoken in Shuǐluò 水洛 township of Mùlǐ.

³ The term “Na languages” is an alternative to the term “Nàxī language” in Chinese linguistic classification. Both comprise, on the one hand, Nàxī proper, or in Chinese classification, the western dialect of the Nàxī language, including the patois of Dàyán Town 大研鎮, Lìjiāng Plain 麗江坝 and Bǎoshān Prefecture 寶山州, and, on the other hand, Moso, or in Chinese classification, the eastern dialect of the Nàxī language, including the patois of Yǒngníng Plain 永寧坝, Běiqú Plain 北渠坝 and Guābié 瓜别 (Hé and Jiāng 1985:104-116, Gài and Jiāng 1990:70). The designation “Na” derives from the fact that the relevant ethnic groups all have “Na” as their group name in their respective autonoms (Yáng 2006). Na languages are held to be transitional between Yí-Burmese and Qiangic languages, sharing lexical material with both groups, but lacking the extensive morphology of (Northern) Qiangic.

The Laze language (known as Mùlǐ Shuǐtián 木里水田 or Lārè 拉熱) is spoken in Xiàngjiǎo 項腳 township of Mùlǐ. The hypothesis of a close relationship between Laze and Na languages essentially relies on the history, culture and self-awareness of the group (based on Guō and Hé 1994:6-7 and fieldwork by Alexis Michaud). Linguistically, it is manifested in important continuity between better researched Na languages (Nàxī and Moso) and Laze in terms of their respective phonological, morphological, lexical and structural organization (based on Huáng 2009 and data collected by Alexis Michaud). The assumption of a close genetic relationship between Laze and Na is equally supported by regular sound correspondences between these languages, as discussed in Jacques and Michaud (submitted). For more information on Laze, see Michaud (2009).

closely genetically related. Section 3 discusses the defining characteristics of Qiangic as an areal grouping. It also reviews alternatives for drawing genetic conclusions about the areal languages of uncertain affiliation, currently labeled Qiangic. Section 4 concludes this paper with some reflections on the issue of subgrouping in the Qiangic context and in Sino-Tibetan at large.

1.1. Qiangic as a genetic unit: Summary and challenges

Qiangic is the hypothesis of a common origin of thirteen, geographically adjacent and little-studied Sino-Tibetan languages of South-West China. Twelve of these languages are still spoken, one is extinct (Tangut).

The idea that some languages of the Chinese Southwest cohere to form a Sino-Tibetan subgroup can be traced to F. W. Thomas (1948:88-109), who proposed a “Hsifan group” based on wordlists of Qiāng, rGyalrong, Púmǐ, Ěrgōng, Ěrsū and Nàmùyī. The label “Qiangic”, under which the group is currently known, was introduced by the eminent Chinese linguist Sūn Hóngkāi in the 1960s as an umbrella term for the Qiāng, Púmǐ, and rGyalrong languages (Sūn 1962:561; 1982).⁴ The Qiangic group was expanded in the 1970s, when new languages discovered and explored in pioneering work by Sūn Hóngkāi in Western Sichuān (e.g. Shǐxīng, Guìqióng, Nàmùyī and Ěrsū) were also seen as Qiangic (Sūn 1983a, 1983b, 2001; further elaborated in Huáng 1991). Finally, Tangut was added to the group in the 1990s (Sūn 1991).

After Sūn (1983a, 2001), the thirteen Qiangic languages are subdivided, mainly on geographical grounds, into (1) a more phonologically and morphologically complex, and relatively better-studied northern branch, and (2) a less phonologically and morphologically complex, and virtually unexplored southern branch. The northern branch includes Qiāng proper, Púmǐ, Mùyǎ, Ěrgōng (Horpa), rGyalrong, Lavrung and Tangut. The southern branch comprises Zhābā, Quèyù, Guìqióng, Ěrsū, Nàmùyī and Shǐxīng.

The Qiangic languages occupy a compact, contiguous geographical area in the borderlands of Tibet. Chinese historiographic sources claim that this area was historically populated by a host of nomadic tribes, traditionally labeled “Hsifan” and closely linked to Tibetan culture and religion.⁵ The Qiangic hypothesis entails that Qiangic languages share a number of common features due to their descent from a (recent) common ancestor.

The Qiangic hypothesis essentially relies on shared lexical items and typological similarities, of which directional prefixes (topography-based spatial deixis) is de facto the essential feature probative of Qiang-ness (e.g. Matisoff 2004:105).⁶

⁴ For the history of Qiangic subgroup, see Sūn (2001:160-164).

⁵ In Chinese historiographic sources, the label “Hsifan” mostly points to peripheral groups in the circumference of ethnic Tibet, sharing with ethnic Tibetan their religions and culture, but speaking their own languages. The same label is also occasionally used as a collective name for everything that is non-Chinese in the western periphery. The term is non-committal as to the genetic relationship between the groups in question, which, while most likely all Sino-Tibetan, are therefore for all purposes to be considered as not closely genetically related.

⁶ After Sūn (2001:166-170), a complete list of Qiangic features probative of the membership in this subgroup includes: (1) shared vocabulary, (2) large number of consonant clusters, (3) large consonant and vowel inventories, (4) uvular phonemes, (5) contrast between prenasalized and plain initials, (6) three medials: *i*, *y*, *u*, (7) vowel harmony (mostly in languages of the northern branch), (8) few or no consonantal

Yet, the Qiangic subgroup has been controversial since it was first proposed, for these four reasons:

(1) The restricted nature of the supporting evidence. This evidence is essentially limited to typologically common features, which are also found with considerable frequency in non-Qiangic languages of the area (see §2 for discussion). The probative value of the evidence is furthermore substantially outweighed by the conspicuous absence of cognacy among the shared systems. This has led some scholars to straightforwardly identify some putative Qiangic features as parallel developments (e.g. LaPolla 2003:30 for case marking and existential verbs) or areal phenomena (e.g. Shirai 2009 for directional prefixes).

(2) The small percentage of shared common vocabulary. While this feature, in contrast to the typological characteristics above, could provide more reliable support for the hypothesis of a common origin of these languages, the percentage of shared vocabulary is relatively small. It ranges from 25% between any two random Qiangic languages in more optimistic estimations (Sūn 1983a:103-105) to less than 20% in more conservative assessments (Huáng 1991:355). In addition, this percentage includes many widespread Sino-Tibetan cognates and there is considerable overlap with other subgroups of the area (most notably, Yí, Na, and Tibetan).⁷

(3) The absence of common innovations. The Qiangic subgroup has so far not been supported by common innovations, i.e. unique events common to the histories of all the languages in the subgroup, as distinct from (a) diffusion across language boundaries, (b) independent, parallel developments, (c) retention from an earlier state or, finally, (d) chance. Common innovations are held to be the only reliable basis for a linguistic subgroup (e.g. Thurgood 2003:5).⁸

codas, (9) tones, (10) reduplication as important means of word formation, (11) singular-dual-plural distinction in nouns, (12) diminutive formation with a suffix derived from the morpheme for ‘child’ or ‘son’, (13) numeral classifiers, (14) case forms of personal pronouns, (15) dual and inclusive-exclusive forms of personal pronouns, (16) person and number agreement in verbs (in languages of the northern branch), (17) directional prefixes, (18) reciprocal forms, (19) differentiation of existential (locative) verbs, (20) rich inventories of case markers.

⁷ To compare, a geographically adjacent non-Qiangic language Moso (Na) shares no less than 26,9% of cognates with Qiāng (estimation based on a sample of 1.017 basic vocabulary items, excluding 141 Chinese loanwords, in Gàì and Jiāng 1990:71).

⁸ The only (phonological) innovation for the Qiangic subgroup proposed so far is brightening, that is, a strong tendency for the PST rhyme *-a to be raised and fronted to -i or -e in Tangut and modern Qiangic languages, as proposed by James A. Matisoff (2004). Matisoff discusses this development essentially in relation to Tangut, but he also points out a number of parallels in modern Qiangic languages. He argues that this development is unusual in the Sino-Tibetan context, and it is therefore a valuable criterion for membership in the Qiangic group. At the same time, Matisoff (2004:350) notes that modern Qiangic languages do not display brightening to the same degree, and that the phenomenon is not regular, either within the same language or cross-linguistically. The following observations regarding this development can furthermore be made. Relatively few items shared by both Tangut and modern Qiangic languages have so far been proposed (33 words in total, Matisoff 2004). Of these, even fewer are shared by more than four Qiangic languages at a time. Conversely, those that are shared by most Qiangic languages, such as ‘salt’ (in 12 languages) and ‘rabbit’ (in 9 languages) appear to be good candidates for cultural loanwords, and are

(4) The historical, ethnic and linguistic complexity of the geographical area occupied by Qiangic languages.

Historically, the area of distribution of the Qiangic languages lies in the zone of mixed Tibetan and Chinese influence, at the intersection of three superpowers that became dominant in the 7th and 8th centuries AD:

- the Tibetan Empire, instituted by Srong-btsan sgam-po (620-649 or 650)
- the Táng Chinese court (618-907)
- the Nánzhāo kingdom (730-902) with its capital in Dàlǐ, later succeeded by the Dàlǐ kingdom (937-1253), related to modern Yí and Bái groups.

These three superpowers were succeeded by a federation of small tribal states, kingdoms, and dependent districts (such as the kingdoms of Nangchen, Lithang, rGyalhang, or rMili), some of which maintained a de facto independent status until well into the 20th century.

Ethnically and linguistically, the area lies at the intersection of, most importantly, Bodic and Yí-Burmese, as well as some unclassified groups, such as Na and Bái. The area of distribution of Qiangic languages is characterized by long-standing multilingualism. Long-standing multilingualism suggests diffusion as key factor in the formation of the languages of the area. It equally poses an important challenge to the subgrouping of local languages as based on common innovations and shared cognates, as no objective criteria have yet been found either to distinguish independent innovations from shared retentions, or to factor out parallel developments or effects of diffusion (see Harrison 2003:232-239 for discussion).

Not surprisingly, in view of the problems above, the membership of the Qiangic subgroup is fluid and has many times been adjusted and remains undecided for some languages.

The Báimǎ language (also known as Báimǎ Tibetan) of Northern Sichuān and Southern Gānsù provinces was added to Qiangic in the 1980s, because it displays features

hence inconclusive as to the genetic relatedness between the languages in question. Finally, this phenomenon is equally attested in non-Qiangic languages of the area, such as Na and Yí. For example, both ‘salt’ and ‘rabbit’ also display the effects of brightening in Nàxī and Moso as well as in Nosu (Northern Yí): ‘salt’, Nàxī and Moso, both tshe³³; Nosu tshu³³ (Zhū 2005:236); ‘rabbit’: Nàxī tho³³le³³, Moso tho³³li³³; Nosu thu²¹tu²¹ (Zhū 2005:162).

Almost all diagnostic words in Matisoff (2004) exhibit the effects of brightening in Nàxī and Moso. For example (based on Hé and Jiāng 1985), ‘to borrow’, PST *r/s-ŋ(y)a, Nàxī and Moso, both ɲi³³ (ibid., p. 161); ‘to listen’, PST *g/r-na, Nàxī kho³³mi³³, Moso kua³³ɲi³³ (ibid., p. 155); ‘moon’, PST *s/g-la, Nàxī xe³³-me³³, Moso ɬe³³-mi³³ (ibid., p. 135); ‘nose’, PST *s-na, Nàxī ɲi⁵⁵mər³¹, Moso ɲi³³gə³³ (ibid., p. 143).

Overall, raising of vowels is a characteristic feature of Northern Yí (Nosu), as compared to other dialects of this language, cf. Zhū (2005:130-131). To take some words held as evidencing brightening in Qiangic languages as examples, ‘to eat’ (PST *dzya): Southern Yí (Mòjiāng 墨江) dzo³³, Western Yí (Wēishān 巍山) dzo²¹, Central Yí (Wǔdìng 武定) dzo³³, Northern Yí (Xǐdé 喜德) dzu³³ (Zhū 2005:288); ‘son’ (PST *za ɰ *tsa), respectively, zo²¹, zə²¹, zo³³, zu³³ (ibid, p. 220); ‘salt’ (PST *tsa): tsho³³, tshə²¹bo³³, tsho³³, tshu³³ (ibid., p. 236).

that are held to be typical of this subgroup, such as directional prefixes (Sūn 1980). Currently, opinions are split between Báimǎ being a separate Bodic language (e.g. Nishida and Sūn 1990, Sūn et al. 2007:207-223) and an aberrant Tibetan dialect (Huáng and Zhāng 1995, Zhāng 1994a, 1994b).

The relationship of the Tangut and rGyalrong languages to Qiangic is equally a matter of ongoing debate. LaPolla (2003:30), for instance, argues that the relation of rGyalrong to the Rawang and Kiranti groups is much clearer than to the Qiangic group, and that similarities shared by rGyalrong and Qiangic may simply be areal influence.⁹

The Nàmùyī language, held as one of Southern Qiangic languages, is argued to be genetically related to Yí and Na languages, rather than to Qiangic languages (Lāmǎ 1994; Huáng 1997:13-15). This conclusion is essentially based on the large amount of related words between Yí, Na and Nàmùyī.¹⁰ Notably, the same conclusion has been reached on the basis of historical, cultural, and anthropological evidence (Yáng 2006).

The Shǐxīng language is likely to be related to Na languages, given that speakers of Shǐxīng are considered by Nàxī historians as part of the Na ethnoses (Guō and Hé 1994:8-9).¹¹

All in all, the Qiangic hypothesis remains problematic. The two major inter-related challenges are: (1) establishing an objective foundation for subgrouping in an area that is historically, ethnically, and linguistically complex, and whose languages have not been previously documented; and (2) gathering sufficient evidence to generate and evaluate hypotheses related to the genetic affiliation of those local languages (currently held as Qiangic) that cannot be straightforwardly integrated into the neighboring genetic subgroups.

2. Qiangic as a genetic unit, as examined on the basis of four Qiangic languages of Mùlǐ

The project “What defines Qiang-ness” takes on the challenging task of assessing the validity of the Qiangic hypothesis. The approach is to focus on little-studied Qiangic languages spoken in one locality, Mùlǐ Tibetan Autonomous County, and to view these languages in the context of equally little-known local varieties of the Tibetan and Na languages.¹² Given that one of the major challenges of the Qiangic hypothesis is the historical, ethnic and linguistic complexity of the area occupied by Qiangic languages, the choice of one locality allows to restrict to a manageable size the scope of contact

⁹ Notably, three northern Qiangic languages, rGyalrong, Lavrong and Horpa-Shangzhai (Ērgōng or Dào fū 道孚 in different classifications) have been demonstrated by Jackson T.-S. Sun (2000a, 2000b) to be an independent and coherent subgrouping in its own right, namely, rGyalrongic.

¹⁰ Inferences that can be drawn from lexical comparisons of some local languages of uncertain affiliation with Yí and Na are complicated by the lack of well-defined diagnostic criteria to distinguish between Yí and Na groups, that share much lexical material. Hence some local languages of Mùlǐ, e.g. Nàmùyī (Lāmǎ 1994; Huáng 1997:13-15) or Laze (Huáng forthcoming), are ambivalent between these two groups in terms of their respective shared vocabulary.

¹¹ Notably, Sūn (2001:167) also points to a large percentage of shared lexical items between Shǐxīng and Na languages, which he argues to be borrowings in Shǐxīng. In a similar vein, Sūn interprets numerous lexical sharings between Ērsū and Yí languages as results of contact (ibid.)

¹² Another important local language, Nosu, is currently not included in the scope of the project.

situation and the number of involved languages in order to coherently assess the impact of both internal (genetic) factors and external (contact) factors. The choice of Mùlǐ as the single locality to be studied is additionally supported by these factors: (1) Mùlǐ displays one of the highest concentrations of Qiangic languages; combining within its borders several Southern Qiangic languages (Lizu, Nàmùzī, Shǐxīng) and one Northern Qiangic language (Púmǐ); (2) Mùlǐ is a historically stable administrative entity (the semi-independent kingdom of rMili), which guarantees recoverability of relevant sociolinguistic and historical information.

Mùlǐ is a multi-ethnic and multi-lingual county. Speakers of the four Qiangic languages of Mùlǐ are officially classified, together with the local ethnic Tibetans (Kami Tibetans), as members of the Tibetan nationality. Together, they account for 32,59% of the county population (Mùlǐ Zàngzú Zìzhìxiàn Zhì Biānzhuǎn Wěiyuánhùi forthcoming). Their most important historical neighbors include Nosu (28% of the county population) and Na groups (Nàxī and Moso together 9,96%). Historically more recent new comers to this area are Sinitic (South-Western Mandarin) (21,32%), Miáo (6,96%), as well as Bùyī, Zhuàng, Bái and some other groups (altogether ca. 1,17%).

The project initially operated under the assumption that the four Qiangic languages of Mùlǐ are closely genetically related. In line with practices of mainstream historical linguistics, the initial goals were accordingly set: (1) to stratify loanwords in the four studied languages from languages whose historical development is well documented and understood (most importantly in the areal historical and cultural context, Tibetan), (2) to find regular sound correspondences over sets of putative cognates, and (3) to search for common phonological and lexical linguistic innovations between the surveyed Qiangic languages.

In contrast to the original assumption of relatedness, the first results of documentation work reveal diversity as a salient feature of the Qiangic languages of Mùlǐ. In fact, contrasts between the languages are so sharp that they cast considerable doubt on the assumed genetic relationship between them (see discussion below). This warrants a closer investigation of newly collected data to further evaluate this diversity, prior to proceeding with work that relies on the assumption of relatedness of the group.

The following subsections (2.1-2.4) discuss similarities between the four Qiangic languages of Mùlǐ, as seen in the context of their most important genetic neighbors (Tibetan, Yí, Na, Sinitic). The proposed comparison is based, on the one hand, on available data on well-described varieties of Tibetan, Yí, Na and Sinitic, and, on the other hand, on newly collected data on the local Mùlǐ varieties of these languages (for the time being, excluding the local variety of Yí). Lexical data are not included in the present overview, suffice it to say that the four languages share relatively few lexical items in their basic vocabulary. Overall, the percentage of shared lexical items is estimated around the customary Qiangic threshold of 20%, with cultural (Tibetan) lexicon accounting for a sizeable part of related words between the four languages.¹³

¹³ Consider some examples from basic vocabulary: ‘man, person’: Púmǐ mǎ⁵¹, Lizu tsho⁵⁵, Nàmùzī tsho³¹, Shǐxīng hǐ⁵⁵; ‘food; rice’: Púmǐ bei⁵¹, Lizu khæ⁵⁵, Nàmùzī dzæ³⁵, Shǐxīng hao⁵⁵. Some examples from more culturally oriented vocabulary include: ‘deity’ (WT *lha*), Púmǐ tǎ⁵⁵, Lizu tǎ³⁵, Nàmùzī tǎ³⁵, Shǐxīng gj^{33-tǎ}⁵⁵; ‘flag’ (WT *dar*), Púmǐ tiæ²⁴, Lizu tæ³⁵, Shǐxīng tiæ³⁵. A side observation is that Tibetan loans in the

2.1. Similarities between the four Qiangic languages of Mǔlǐ

The present list of similarities is not intended to be exhaustive or final, but rather represents work in progress that will have to be modified when more comparative data become available. The list was initially intended as an overview of all shared features between the four Qiangic languages studied in the project (Lizu, Nàmùzī, Púmǐ, Shǐxīng). Coincidentally, the shared features turned out to be essentially restricted to features postulated as characteristic of the membership in the Qiangic subgroup (such an overlap is indicated below as “Qiangic feature”). Notably, the list does not include such common features shared by the majority of local genetic subgroups (excluding only the later arrival into the area, Sinitic), as SOV or Noun-Adjective word orders. I have also omitted some relatively non-committal Qiangic features, such as “large consonant and vowel inventories”, especially because those of the four examined languages do not appear to be significantly larger than those of their generic neighbors.¹⁴ And in order not to detract from the main line of argument, illustrative examples are deferred to the appendix at the end of the paper.

Features shared by the four Qiangic languages of Mǔlǐ include:

- (1) Pronunciation of the vowel /u/ (in Púmǐ ɵ) as a syllabic bilabial trill after bilabial and apical stops
- (2) Uvular phonemes: (a) contrastive with velars, as in Lizu, Nàmùzī and Shǐxīng, or (b) allophones of velar phonemes, as in Púmǐ (Qiangic feature)
- (3) Common principles of prosodic organization: tone systems characterized by culminativity—a restriction of not more than one pronounced lexical tone per prosodic word with one tonal assignment (mostly restricted to the first syllable of the word) affecting much or all of the prosodic word (Qiangic feature “tones”)
- (4) Identical principles of word-formation, including: (a) extensive use of reduplication (Qiangic feature), (b) compounding and (c) affixation. The latter comprises:
 - (i) Kinship prefix *a-* (for older kin)

four Qiangic languages appear to derive from distinct donor dialects. For example, ‘flower’ is *nbu*³³-*ru*⁵⁵ in the local Tibetan dialect (Kami), but *me*³³-*tɕo*⁵⁵ or *me*³³-*to*⁵⁵ in Lizu, and *mi*⁵⁵-*tɕo*³¹ in Nàmùzī, all related to WT *me tog*.

¹⁴ For example, Púmǐ has a total of 42 initials (40 initial consonants and 2 consonant clusters) and 34 rhymes (7 oral vowels, 5 nasal vowels, 22 diphthongs). To compare, Nosu has 44 initial consonants and 10 rhymes (8 syllabics, 2 non-syllabics) (Lǐ and Mǎ 1985:83-84). Bātáng 巴塘 ‘*ba’ thang*’ Tibetan has 48 initials (42 initial consonants, 6 consonant clusters) and 31 rhymes (9 oral and 8 nasal vowels, 5 diphthongs and 9 rhymes ending in a glottal stop) (Gésāng 1985:16, 20).

The Qiangic feature “case forms of personal pronouns” is not included in the present list, as in the surveyed languages, these forms are transparent combinations of a relevant personal pronoun and a case marker. For this reason, this feature is subsumed on the list under “case marking”. The Qiangic feature “reciprocal” is included on the list under “reduplication”.

- (ii) Diminutive suffix derived from the morpheme for ‘child’ or ‘son’ (Qiangic feature, non-related forms)
 - (iii) Gender suffixes for animals
- (5) Case marking governed by empathy hierarchy (with, most importantly, agentive, animate patient, genitive and locative case markers) (Qiangic feature, non-related forms)
- (6) Numeral classifiers (Qiangic feature, for the most part non-related forms, see §2.2 for discussion)
- (7) Directional Prefixes (Qiangic feature, for the most part non-related forms)
- (8) Past/non-past distinction (suppletive forms) in some high frequency verbs and nominalization markers (for the most part non-related forms)
- (9) Multiple existential verbs (Qiangic feature, for the most part non-related forms)

All in all, similarities (phonological, morphological, syntactic) between the four languages are strikingly few. Furthermore, given the apparent non-relatedness of relevant markers in shared systems, the majority of similarities are symptomatic of parallel developments. The observed phenomena can also be interpreted as pattern-borrowings, that is, replications of the abstract organizational pattern of the model construction of an external source using suitable elements in the replica language (Matras and Sakel 2007). Put differently, the structural similarities observed between the four languages are likely to be instances of grammaticalization, where only the patterns of the other language are replicated (i.e. the organization, distribution and mapping of grammatical or semantic meaning), while the form itself is not borrowed. Overall, this type of grammaticalization is typical for linguistic areas.

2.2. Differences between the four Qiangic languages of Mùlǐ

The range of differences between the four surveyed languages is far more extensive and involves virtually all linguistic sub-systems. Differences can further be divided into two types: (1) overall dissimilarities (non-overlapping systems), and (2) dissimilarities among overlapping systems (non-cognate marking).

The former type of differences can be illustrated by distinct orders of demonstrative and noun in the four languages. The four Qiangic languages of Mùlǐ have no less than three distinct orders for demonstrative and noun, namely:¹⁵

- (1) Dem-N (Púmǐ and Lizu), e.g. Púmǐ u¹¹ti⁵⁵ mə⁵¹ ‘that woman’, Lizu ku⁵⁵-the³³# jæ³³-qɑ⁵³ ‘this child’

¹⁵ Púmǐ data are from Guillaume Jacques (p.c.) and Lù (2001); Lizu and Shǐxīng data are from personal research; Nàmùzǐ data are from Huáng and Rénzēng (1991) and from personal research.

(2) N-Dem (Nàmùzī), e.g. ju³¹ tæ⁵⁵=ly⁵⁵ ‘this house’

(3) Dem-N-Dem (Shǐxīng), e.g. ha⁵⁵ tō⁵⁵-pi⁵⁵ ha⁵⁵ ‘this story’, thi⁵⁵ hī⁵⁵# thi⁵³ ‘that man’.

Notably, Shǐxīng also has an alternative order, N-Dem, as in pu⁵⁵-mi³³ ha³³ ‘this frog’, hī⁵⁵ thi³³ ‘that man’. There appears to be a semantic distinction between the two variant orders, with the latter rather more specifically denoting definiteness of the modified noun, e.g. bō⁵⁵# phu³³-tǎi³³-tǎi⁵⁵# thi⁵³ ‘the (or that) white yak’ (Chirkova 2009).¹⁶

As to the latter type of differences (dissimilarities among overlapping systems), none of the overlapping structural features listed in §2.1, has cognate marking in all four languages (see the appendix at the end of the paper). In addition to the apparent non-relatedness of relevant markers, the structural features shared by the four languages vary widely with respect to specific semantic and syntactic contexts and the degree of grammaticalization per language. Let us take numeral classifier systems in the four languages as an example. (I will restrict the comparison to a more grammaticalized category of classifiers, namely sortal classifiers, i.e. those that individuate whatever they refer to in terms of the kind of entity that it is.) Based on the overall number of classifiers and their morphosyntactic environments and functions, the following patterns emerge.

Nàmùzī has the most developed system among the four languages. In terms of the overall number of sortal classifiers, Nàmùzī has most classifiers of the four compared languages. Some frequent forms include: (a) mo for people and large animals, (b) phæ for cattle, (c) jæ for small animals, (d) po for trees, plants, (e) ly, general classifier for inanimate entities. Classifiers in Nàmùzī can directly modify nouns, which use serves to increase precision of reference. This is to say that if a classifier occurs as the only determinative of the noun, it expresses singularity and referentiality (specificity or definiteness). For example, bu⁵⁵=phæ⁵³ ‘(that, definite) yak’, nbrə³¹=mo⁵⁵ ‘(that, definite) wife, woman’. Finally, nouns in Nàmùzī cannot be modified by numerals without an accompanying classifier, and Nàmùzī classifiers are obligatory with both numerals and demonstratives.

Púmǐ also has relatively many sortal classifiers. For example, mǐ²²mə⁴⁴ tɜ⁵⁵=tsə⁵⁵ ‘one beggar’, sɜ¹¹kɜ¹¹ra¹¹dzu⁵⁵ tɜ⁵⁵=tsa⁵⁵ ‘one stick’, zə⁵⁵pə⁵⁵ tɜ¹¹=pɛ⁵⁵ ‘one axe’. As a rule, Púmǐ classifiers cannot modify a noun without an accompanying numeral and numerals cannot modify a noun without an accompanying classifier. A classifier is not required with a demonstrative.

Quite dissimilar to the relatively well-developed classifier systems in Nàmùzī and Púmǐ, those of Lizu and Shǐxīng are fairly restricted and consist each of only two shape-

¹⁶ The demonstrative pronouns in the four languages are as follows: Púmǐ tə¹¹bie⁵⁵ ‘this’, u¹¹bie⁵⁵ ‘that’; Lizu ku⁵⁵-the⁵⁵ ‘this’, vo⁵⁵-the⁵⁵ ‘that’; Nàmùzī tæ⁵⁵=ly⁵⁵ ‘this’, tʂho³¹=ly⁵⁵ ‘that’; Shǐxīng ha³⁵ ‘this’, thɜ³⁵ ‘that’. Demonstratives in Nàmùzī are obligatorily followed by the general classifier ly, the etymology of the second syllable of Lizu demonstratives is uncertain.

based sortal classifiers. These two classifiers are furthermore only used with numerals and are not required with demonstratives.

In Lizu, the two sortal classifiers are: (1) *kæ* ‘strip’, a classifier for elongated objects, e.g. *dze⁵⁵ te³³=kæ³³* ‘river’, *bræ⁵⁵ te⁵⁵=kæ⁵⁵* ‘one rope’; and (2) *pu*, a more general classifier, widely used with non-human and, more specifically, flat objects, e.g. *ruæ⁵⁵ te³³=pu³³* ‘one chicken’, *nbu⁵⁵-to³³ te³³=pu³³* ‘one knife’. A numeral in Lizu does not require to be followed by a classifier, if the noun that it modifies is animate, e.g. *ndzo⁵³ te³³* ‘one Chinese’, *tsho⁵⁵# ze⁵³* ‘four people’. In the case of inanimate nouns, a classifier is not required with the numeral *te⁵³* ‘one’, e.g. *se⁵⁵-dzu³³-me³³ te³³* ‘one log’.

Finally, the two sortal classifiers in Shixīng are (1) the general classifier *ku* ‘item’, e.g. *li³⁵ na³³-ku³³* ‘two hands’, *ɕi³³-bɜ⁵⁵# guɜ³³-ku⁵⁵* ‘nine pans’; and (2) the classifier for elongated objects *rě* ‘strip’, e.g. *lɜ⁵⁵-si³³# dzi³³=rě⁵⁵* ‘one arrow’, *qhao³³-wu⁵⁵# ɲi³³-rě⁵⁵* ‘two sticks’. A classifier in Shixīng cannot modify a noun without a numeral, whereas the numeral *dzi³⁵* ‘one’ can co-occur with nouns without a classifier, to denote indefiniteness and singularity. The following table summarizes the observed patterns:

	Number	Can a classifier modify a noun without a numeral? (Related function)	Can a numeral modify a noun without a classifier? (Related function)	Are classifiers obligatory with demonstratives?
Nàmùzī	many	+ (singularity, definiteness)	-	+
Púmǐ	relatively many	? ¹⁷	-	-
Lizu	2	some can (singularity, definiteness)	+ (mostly with animate nouns; numeral ‘one’, indefiniteness)	-
Shixīng	2	-	+ (numeral ‘one’, indefiniteness)	-

Table 1. Number, morphosyntactic environments and functions of sortal classifiers in the four Qiangic languages of Mùlǐ

The observed degree of variation between the four Qiangic languages of Mùlǐ (both in terms of overall disparity of their respective lexical, phonological, morphological and syntactic organization and of scalability and non-cognacy of shared systems) is unusual for a low level subgroup, which Qiangic is purported to be, especially given the contiguity of the geographical area occupied by the four surveyed languages.¹⁸ In contrast

¹⁷ Some isolated uses of classifiers modifying nouns without an accompanying numeral have been attested in traditional Púmǐ stories. Their precise meaning and function require further investigation.

¹⁸ Conversely, a comparable degree of variation is possible in geographically discontinuous groups. For instance, in relation to the order of demonstrative and noun and differences in classifier use as evoked above, comparable examples can be found, respectively, among Chin languages, which combine Dem-N, N-Dem and Dem-N-Dem orders within one group, Dryer 2008:41-42, and Sinitic languages. In the latter group, Cantonese exhibits a number of unusual characteristics in the syntax and semantics of its classifiers, such as the possessive classifier construction, which are not paralleled in other Sinitic languages (Matthews

to the observed diversity, the expectation would rather be that similar organization of these purportedly closely genetically related languages is reinforced through contact, as it is generally held that areal influence contributes to retaining ancestral characteristics (e.g. Dryer 2008:24). Alternatively, in linguistics, as in biology, overall similarity and recency of ancestry are usually proportional (e.g. Sokal and Sneath 1963:223, Nichols 1992:250). This is to say that groups characterized by a large number of similarities are more likely to be more recently evolved from a common ancestor, whereas groups that have few similarities in common are more likely to have diverged from a common ancestor at a much older date. The striking diversity of the four Qiangic languages of Mùlǐ is hence critically in need of explanation when generating hypotheses concerning the relationship between these languages and their linguistic history.¹⁹

2.3. Similarities between the four Qiangic languages of Mùlǐ in an areal context

Let us now turn to an examination of the similarities between the four Qiangic languages of Mùlǐ from an areal perspective, as compared to their genetic neighbors Yí, Na, Tibetan, and Sinitic (South-Western Mandarin). I will compare the four Qiangic languages first to well documented varieties of these latter languages and then to newly documented varieties of these languages spoken in Mùlǐ. On the whole, the majority of similarities between Lizu, Nàmùzī, Púmǐ, and Shǐxīng are non-specific to the Qiangic languages of Mùlǐ and, instead, shared with their genetic neighbors.

All in all, among the similarities shared by the four Qiangic languages of Mùlǐ, as considered in the context of their neighboring languages, three types of situations can be distinguished: (1) similarities shared across several local subgroups, (2) similarities shared by the four Qiangic languages with only one of the local subgroups (either Yí, Na or Tibetan), and (3) features more specific to the languages of Mùlǐ (both Qiangic and non-Qiangic) and not shared by the languages spoken in the neighboring areas.

The first type includes features that are shared with most neighboring subgroups, essentially with Yí, Na, and Sinitic. These include: extensive use of reduplication in word formation, gender suffixes for animals, diminutive formation with the morpheme for ‘child’ or ‘son’, kinship prefix *a-* and numeral classifier systems.

The second type includes features that are shared either with the southern genetic neighbors of the four Qiangic languages (i.e. Yí and Na languages), or with their northern genetic neighbor (Tibetan). Features shared with Yí and Na include (1) pronunciation of /u/ as a bilabial trill after bilabial and apical stops, as characteristics of all Northern Yí varieties as well as of Na languages, and (2) multiple existential verbs.²⁰ Features shared

2006). Crucially, such instances of deviation from one common type in a geographically discontinuous group are generally attributed to language contact with other genetic groups. For example, in the case of Cantonese, the unusual characteristics of its classifier systems are argued to be due to contact with Tai-Kadai and Hmong-Mien languages (Matthews 2006).

¹⁹ One possible explanation of the striking diversity of the Qiangic languages of Mùlǐ, if these are taken to be members of one lower genetic subgroup, would be a recent abrupt migration, which, however, does not appear to be the case, according to the respective oral histories of the groups (as outlined in Xiè 1992:48).

²⁰ For Northern Yí varieties, see Lǐ and Mǎ (1983:52-53, 77), for Na languages, see, for instance, Yang (2009:3) for Yǒngníng Na. For multiple existential verbs in Yí, see Zhū (2005:160-161); in Na, see Hé and Jiāng (1985:51-53).

with Tibetan are (1) case marking, and (2) past/non-past distinction in some high frequency verbs. Finally, while held to be essentially exclusive to Qiangic languages and not typical in well documented, standard varieties of Yí, Na and Tibetan, uvular phonemes are equally attested in Moso (Gài and Jiāng 1990:71-72), in some varieties of Nosu (Lāmă 1994:51), as well as in a number of Tibetan dialects spoken in the zone of distribution of Qiangic languages.²¹

The third type comprises: (1) tone systems characterized by culminativity, and (2) directional prefixes. These are features that appear exclusive to the local linguistic varieties of Mùlǐ.

Let us now examine the similarities between the four Qiangic languages in the context of the previously unrecorded local varieties of Tibetan, Na, and Sinitic, spoken in Mùlǐ, as studied in the context of the Qiang-ness project. These local varieties are, respectively, Kami Tibetan (data from personal research), Laze (based on Huáng 2009), and the local Chinese dialect (based on Lǐ 2010).

Kami Tibetan is spoken by the historically oldest inhabitants of Mùlǐ.²² This dialect appears to possess almost the precise combination of similarities, as shared by the four Qiangic languages of this county, including even those that are generally held to be exclusive to Qiangic languages (such as directional prefixes), and only excluding pronunciation of /u/ as a bilabial trill after bilabial and apical stops and the precise categorization of existential verbs (see Appendix for examples). In fact, spoken in the geographic zone occupied by Qiangic languages, the Kami Tibetan dialect appears to possess almost an entire set of features which are held as diagnostic of the membership in the Qiangic subgroup. It even exhibits such strikingly non-Tibetan features as extensive use of reduplication in word formation and an incipient classifier system.

Laze, which is likely to be closely related to Na languages, is said to have arrived in Mùlǐ approximately six generations ago from the neighboring Yányuán County (Guō and Hé 1994:6-7). It likewise exhibits a number of diagnostic Qiangic features. For example, (1) directional prefixes, namely: (a) *ge-* ‘upward’, (b) a more general prefix *thia-* or *thie-* that can indicate several distinct directions, and (c) a perfective prefix *la-*; and (2) case forms of personal pronouns distinguished by tonal alternation. For example, the first person pronoun: absolutive form *ŋɑ⁵³* ‘I’, ergative/agentive form *ŋɑ³¹*, genitive form *ŋɑ³³* ‘mine’; the second person pronoun: absolutive form *nu³³* ‘you’, ergative/agentive form *nu³¹*, genitive form *nu³³* ‘your’ (Huáng 2009).

Similar to Laze, the local dialect of Chinese arrived into the area relatively recently (estimated as ca. 2-3 centuries ago). Nevertheless, this local Chinese dialect has demonstrably undergone considerable restructuring. The most striking non-Sinitic

²¹ These Tibetan dialects include, for instance, Yǎjiāng 雅江 *nyag chu kha*, Acuo (2008); Shíbàzi 石壩子 *kun sngon*, Huá and Gǎzàngtā (1997); Zhongu 熱務溝 *zho ngu*, J. Sun (2003:782-783). (All three dialects are spoken in Northern Sichuān.)

²² According to Kessler (1986:20, 46), Mùlǐ has been settled by Tibetans since ca. 680 AD, i.e. after the unification of the Tibetans with the Hsifan nomadic tribes, who settled in the areas to the East of Tibet between 618 and 906 AD. However, it was only after 1253 that Mùlǐ formed the southeastern corner of the at that time still existing Tibetan empire.

morphosyntactic features acquired by this dialect in Mùlǐ, as compared to its kin varieties outside Mùlǐ (including even those spoken in the neighboring counties of Yányuán and Xīchāng, Lǐ 2010), are a variant verb-final word order, accompanied by the Noun-Numeral-Classifier order, and the development of several cases marked by postpositions.²³ Case marking in the Mùlǐ dialect of Chinese is yet another example of pattern-borrowing, in which one native Chinese morpheme, ʃaŋ^{213} or xəŋ^{213} 上, is used to denote various relations within the noun phrase, approximating those of cases in the local languages, most importantly, animate patient (primary object or anti-ergative), instrumental and locative cases.²⁴ The ongoing restructuring of Chinese and Laze, witness of the intensity of language contact situation in Mùlǐ, are equally remarkable for their evident rapidity, which is quite contrary to the assumption that processes of convergence take millennia to complete.²⁵

In sum, a preliminary comparison of the four Qiangic languages of Mùlǐ in an areal context yields diversity as the most characteristic feature of these languages and no features that are exclusively shared by these languages and are not shared (separately or as an entire set) by the local varieties of the languages of the neighboring genetic subgroups. At the same time, the process of contact-induced restructuring, as observed in the latter languages, is suggestive of Mùlǐ as a zone of active contact-induced structural convergence.

2.4. Some preliminary conclusions

The following conclusions to the discussion in this section can be made.

First, the Qiangic hypothesis in its southern end is based on insufficient evidence. Notably, it overlooks the fact that features postulated as probative of Qiang-ness are

²³ Consider the following example of the S-O-Num-Cls-V word order in this dialect:

i^{21}	thien^{44}	ten^{53}	lao^{53}	ʃ	tha^{44}	tɕiəu^{213}	tʂu^{44}	$\text{tso}^{213}\text{tər}^{44}$	i^{21}	ko^{213}	ɕian^{53}
一	天	等	了	是	他	就	豬	坐墩兒	一	個	想
one	day	wait	PRF	be	3	just	pig	rump	one	item	think

iao^{213} .

要

want

‘He waited one whole day, he really wanted to buy a piece of pig’s rump.’

²⁴ For example, (1) animate patient marking: $\eta\text{o}^{53}\text{men}^{44} \text{ŋi}^{53} \text{ʃaŋ}^{213} \text{taŋ}^{44} \text{fan}^{44}i^{21}$ 我們你上當翻譯。‘We will translate for you.’; $\eta\text{o}^{53}\text{men}^{44} \text{xai}^{21}\text{ʃ}^{213} \text{tha}^{44} \text{ʃaŋ}^{213} \text{tsen}^{44}\text{tʂoŋ}^{213}$ 我們還是他上尊重。‘We do respect him.’; (2) instrumental marking: $\text{tɕiəu}^{213} \text{ken}^{44} \eta\text{o}^{53}\text{men}^{44} \text{nian}^{53} \text{ko}^{213} \text{tʂei}^{213} \text{nian}^{53} \text{thian}^{44} \text{thiao}^{21}\text{ken}^{44} \text{ʃaŋ}^{213} \text{tʂh}^{21}\text{fan}^{213} \text{ian}^{213} \text{lei}^{44}$ 就跟我們兩個這兩天調羹上吃飯樣的 ‘just like the two of us were eating with a spoon this couple of days’, (3) locative marking: $\text{pan}^{213} \text{thi}^{44} \text{ʃaŋ}^{213} \text{loŋ}^{53} \text{lao}^{53} \text{ʃ}^{213}$ 半梯上攏了 ‘reached half the stairs’.

²⁵ Comparable cases of rapid typological restructuring include, for instance, Malay and Portuguese in Sri Lanka (Bakker 2006).

equally attested in the local varieties of languages of the neighboring genetic subgroups (Yí, Na, Tibetan, Sinitic).

Second, the profound restructuring of the local non-Qiangic languages (e.g. the Tibetan and Chinese dialects of Mùlǐ) indicate that Mùlǐ is an active convergence area, that includes languages that are genetically unrelated, but share a number of distinctive traits. In other words, the fact that genetically unrelated local languages share a number of distinctive traits is precisely because of contact-induced diffusion.

Third, given the intensity and extent of the convergence process, as glimpsed through the local varieties of languages of known affiliation, convergence cannot be excluded as a (non-genetic) factor which has contributed to the formation of the little-known and highly distinct languages of Mùlǐ, currently labeled Qiangic. Furthermore, given that cross-linguistically, no cases of completely isolated structural interference in just one linguistic subsystem have so far been attested (e.g. Thomason and Kaufman 1980:60), the degree of restructuring as observed in languages of Mùlǐ is symptomatic of comparable interference affecting a range of linguistic subsystems of the languages labeled Qiangic, including also their respective lexicon.²⁶ In this context, the diagnostic value of lexical comparisons, if lexical correspondences are taken to be the only or the weightiest indication of genetic relatedness, is at best uncertain.

In sum, in view of the salient dissimilarities in all linguistic subsystems and the demonstrable similarities with genetically unrelated local languages, it appears prudent to err on the side of caution and, hence, to consider these four Qiangic languages of Mùlǐ as not closely genetically related.

3. Qiangic as an areal grouping: Defining features and member languages

The preceding discussion suggests that the initial research goals and the related methodology of the Qiang-ness project are in need of adjustment. In my personal work, the main objective of the project remains related to the Qiangic hypothesis, albeit in a new understanding, that is, as an areal grouping. I propose to investigate the history and the (respective) affiliation of the languages currently labeled Qiangic as critically related to the history of the area in which they are spoken, and which is typified by a number of salient traits. The two newly formulated objectives, namely, (1) studying the Qiangic area, and (2) inferring the relationship between its little-studied member languages currently labeled Qiangic, are discussed in turn below.

Linguistic or convergence areas (such as Mùlǐ or, broader, Qiangic) have been argued to be essentially analogous to geographical dialect continua, with different features (isoglosses) extending over different areas (e.g. Dahl 2001, Bisang 2004, 2006:88). Given this parallel, convergence areas can be profitably studied using methods and major insights of dialectology, of the latter, most importantly, a contrast between the typologically more consistent core and more diverse periphery. The relevant approach consists in: (1) defining characteristic local features, (2) describing their geographical

²⁶ As argued by Thomason and Kaufman (1988:207), “extensive diffusion from a foreign language is likely to penetrate into all subsystems, causing phonological changes in inherited vocabulary, some of them irregular; morphosyntactic changes, with and without the diffusion of actual morphemes; and changes in the lexical semantic structures of retained morphemes”.

distribution and local configurations, (3) adducing reasons for this distribution: arriving at an understanding of the (socio)linguistic mechanisms that lie behind the geographical distribution of linguistic phenomena, the location of isoglosses, and the diffusion of linguistic innovations.

In the area under discussion, the defining areal features considerably overlap with those established for the Qiangic subgrouping hypothesis (Qiangic as a genetic unit), but they are not limited to them. A new understanding of Qiangic as an areal grouping naturally entails that a coherent understanding of its linguistic history as well as that of its member languages necessitates moving beyond the current practice of restricting the scope of examined languages to those labeled Qiangic. Increasing the scope of languages naturally increases the number of relevant characteristic traits. For example, characteristic features of Mùlǐ are essentially those outlined for Lizu, Nàmùzī, Púmǐ, and Shǐxīng in §2, but not limited to these. When all local languages are taken into account, a complete list of features is likely to be larger, with some features non-overlapping for some languages. For instance, pronunciation of /u/ as a syllabic bilabial trill after bilabial and apical stops is equally common for Nosu, Lizu, Nàmùzī, Púmǐ (after ə), and Shǐxīng, but this feature is not attested in Kami Tibetan. Also, an egophoric-non-egophoric (conjunct-disjunct) system is shared by Kami, Lizu and Púmǐ (and possibly, Laze), but not by Nàmùzī or Nosu.

As pointed out in §2, features shared by Lizu, Nàmùzī, Púmǐ, and Shǐxīng can be further divided into those shared by these languages (1) with several neighboring genetic groups, (2) with either the southern or the northern genetic neighbors of these languages, and (3) those, mostly restricted to the languages of Mùlǐ (of all local genetic subgroups). Discarding the non-committal first type, the second and the third type appear most telling as to the linguistic history of the local Mùlǐ languages. Namely, the second type is suggestive of a link (either genetic or through contact) with either Yí, Na, or Tibetan, whereas the third type that is essentially restricted to the Qiangic area (exemplified by directional prefixes, and, possibly, also uvulars) is potentially indicative of some features that may originate in the local languages, that are unrelated to any of the better known local genetic subgroups (Yí, Na, Tibetan).²⁷

Furthermore, the precise inventory and the scalability of the structural (typological) features that are shared by the languages of Mùlǐ are symptomatic of a transition in the area between two widely divergent typological types, namely (1) Tibetan and (2) Yí and Na. Of these two types, Tibetan is agglutinative with complex suffixal morphology (e.g. well-developed case marking systems). It does not have numeral classifiers or multiple existential (locative) verbs. Tibetan has template word-tone systems (J. Sun 1997). The typologically close Yí and Na, on the other hand, are predominantly isolating. Yí expresses syntactic relations essentially by means of a rigid word order, whereas Na makes restricted use of case marking. Both Yí and Na have well-

²⁷ I note that the adoption in some local languages of the uvular phonetic realization of velar phonemes before low vowels (as in Púmǐ, Kami Tibetan or some varieties of Nosu) may be due to diffusion, in a fashion that is possibly similar to the adoption and spread of the uvular phonetic realization of the /r/ phoneme in various western European languages, originally from French (Trudgill 1983:56-59).

developed systems of numeral classifiers and multiple existential (locative) verbs. The two groups have omnisyllabic tonal systems.²⁸

Language contact in the research area leads to the mutual rapprochement of these distinct types, yielding a number of transitional subtypes in the languages of Mùlǐ. This development can be clearly detected in the local languages of known genetic affiliation. For example, Kami Tibetan acquires such a non-Tibetan trait as an incipient classifier system, whereas the local Chinese dialect develops such a non-Sinitic feature, as a system of postpositional case markers. Notably, in Sino-Tibetan at large, those structural features that are common in the languages of Mùlǐ (e.g. case marking, numeral classifiers, multiple existential verbs) are held to be recent, largely independent and subject to contact effects from nearby languages (e.g. LaPolla 1994, Bradley 2005:224 for classifier systems). This entails that in local Mùlǐ languages of uncertain affiliation, these linguistic systems are likewise likely to have been affected by language contact, potentially obscuring the relationship of these languages with their possible relatives outside of the area.

Let us now turn to the issue of inferring the genetic affiliation of the local phylogenetically more obscure languages (Púmǐ, Lizu, Nàmùzī, Shǐxīng). Two possibilities are conceivable:

- (1) These languages are related to the neighboring genetic subgroups and are considerably restructured through contact in the area to obscure the original relatedness.
- (2) These languages are genetically unrelated to the neighboring genetic subgroups and, possibly, also to each other, with a further possibility of distinct subgroups among them, similar to rGyalrongic, and/or isolates. These languages may likewise be considerably restructured through contact to make them more similar to their non-genetic areal neighbors.

Reliance on areal characteristic features confounds the two types (the current Qiangic hypothesis, Qiangic as a genetic unit). Conversely, differentiation between the two possibilities necessitates new subgrouping that will take into account (1) areal tendencies, as gleaned through restructuring of local varieties of languages whose genetic affiliation is not disputed, and (2) typological profiles of the neighboring genetic subgroups to serve as reference points for comparison. In sum, it calls for an interdisciplinary approach,

²⁸ In addition, the recent arrival into the area, Sinitic, represents yet another typological type. Similar to Yí and Na, Sinitic is isolating, it has omnisyllabic tones, and a well-developed numeral classifier system. On the other hand, Sinitic has a predominant verb-medial word order and no multiple existential verbs.

A clear transition from highly developed to more reduced classifier systems can be observed in Na languages, as one moves from south (Yúnnán, Nàxī) to north (Sichuān, Moso), towards the research area discussed presently. Hence, Nàxī has slightly over 40 sortal classifiers (as counted from Pinson 1998:245-251), Yǒngníng Na has approximately 15 sortal classifiers (Lidz 2006:8-14, Yang 2009:24-25), whereas Laze has only 5 to 10 sortal classifiers (Huáng forthcoming, Alexis Michaud, p.c.). This transition appears further accompanied by that (also south to north) from omnisyllabic tone systems (Nàxī) to restricted tone systems, characterized by neutralization of tonal contrasts (Yǒngníng Na, Laze). A correlated development is that of classifiers: from free forms (Nàxī) to bound forms (enclitics to numerals, as in Laze).

combining studies on language typology, language contact, and comparative-historical linguistics.

The conventional subgrouping procedure based on prioritizing a limited number of similarities that may be indicative of common ancestry (common innovations) and essentially favoring one linguistic subsystem (lexicon), in the absence of objective criteria to factor out diffusion, cannot guarantee objectivity of results in an area of considerable historical, ethnic and linguistic complexity (such as the one discussed presently), especially in the absence of previous attestations of its languages. A reliable alternative consists in subgrouping based on a maximum large number of synchronic similarities, that are further not prioritized as to their historical significance, that is, overall synchronic similarities, whatever these similarities may signify (genetic inheritance or results of diffusion). Overall similarity between any two languages or groups of languages is a function of the similarity of the many traits in which they are being compared. (Note that the use of a broad range and variety of correlated similarities, both in structure and form, effectively eliminates chance and parallel developments as their possible origins.) Distinct subgroups can be constructed because of diverse trait correlations in the groups under study. Notably, this procedure yields natural groups, that is, groups whose members share many correlated features and which are, for that reason, likely to be monophyletic. Finally, overall synchronic (phenetic) similarity and phylogenetic history are treated as formally independent of one another, and phylogenetic information is obtained by conjecture from synchronic type of evidence.²⁹

A natural objection to this approach may be that reliance on synchronic similarities runs the risk of confounding among similarities those due to genetic inheritance and those due to convergence. Fortunately, in linguistics, as in biology, phenetic groups are usually monophyletic and there is as yet no acceptable evidence that overall convergence or convergence in phenetic resemblance does take place to any marked extent (e.g. Sneath and Sokal 1963:97). Furthermore, in linguistics, mixed languages, such as pidgins and creoles (e.g. Ma'a [Mbugu] or Media Lengua), whose origins are non-genetic, represent an extremely rare and unusual effect of societal contact, so that, in most cases, it is possible to distinguish mixed languages, whose origins are non-genetic, from languages whose development has followed a more common genetic line (cf. Thomason and Kaufman 1988:3). The local Tibetan dialect of Mǔlǐ is a case at hand. While considerably restructured due to areal convergence (acquiring many non-Tibetan features and loanwords), its lineage is beyond dispute (given overall clear continuity in its phonology, morphology, lexicon and syntax with its nearest relatives outside of the area).

I propose to use this procedure as a hypothesis-generating tool in connection to the (respective) affiliation of Púmǐ, Lizu, Nàmùzī, and Shǐxīng. This procedure can rely on existing hypotheses based on impressionistic or more systematic and grounded

²⁹ The approach is that of numerical taxonomy in biology, based on the ideas of Michel Adanson and developed in Sneath and Sokal (1963). Applied in linguistics, this approach is an excellent candidate for quantitative methods, such as NeighbourNet, which is argued to favor a phenetic, rather than a cladistic approach (McMahon and McMahon 2006:72), or statistical methods, as, for instance, used in dialectometry. A similar approach is advocated in Kessler (2001), where it is however restricted to the domain of lexicon, to allow application of statistical methods in historical linguistics.

assessments of the overall respective similarities of these languages with their various neighbors. According to these previous hypotheses, Púmǐ is conceivably related to Qiāng and Mùyǎ, as argued to be fully substantiated by cognate sets (Thurgood 2003:17). Shǐxīng, on the other hand, is likely to be related to Na languages (Guō and Hé 1994:8-9). Finally, on the strength of, for the time being, impressionistic lexical and structural similarities, Nàmùzī and Lizu may be more closely related to Yí languages than they are to their remaining linguistic neighbors (for Nàmùzī, see Lāmǎ 1994; Huáng 1997:13-15).³⁰ Needless to say, at this stage, these are merely working hypotheses, to be either confirmed or falsified by systematically taking into account a variety of linguistic subsystems and features.

In the remainder of this section, I will elaborate on the hypothesized close relationship between Shǐxīng and Na languages, as this relationship appears to be most straightforward among all aforementioned cases. This relationship is assessed against the background of areal typological tendencies, as discussed above.

Shǐxīng displays significant similarity with Na languages in all its linguistic subsystems and no comparable similarity with any other local language or group of languages. Most importantly, there is substantial continuity between Na languages and Shǐxīng in terms of their morphology and syntax (as a productive combination of meaning and form), namely:³¹

(1) Derivational morphology. Gender suffixes for animals, ‘male’: Nàxī phv³³, Shǐxīng phɜ; ‘female’ (feminine and augmentative): Nàxī mi³³/mv³³, Shǐxīng mi. Nàxī male suffix zo³³ corresponds to the male and diminutive suffix zō in Shǐxīng. Both forms stem from morphemes for ‘male, son’.

(2) Aspectual marking:

(a) progressive aspect marker (grammaticalized in Moso and Shǐxīng from the locative verb ‘to exist’), i.e. Yǒngníng Na dzo³¹; Shǐxīng dzō. Compare, ‘to exist’: Yǒngníng Na dzo³³, Shǐxīng dzō⁵⁵

³⁰ For example, Lizu shares with Yí many lexical items (Sūn 2001:167). It also shares with Nosu many grammaticalizations (both form and function), such as (1) grammaticalization from ‘man, person’ (Lizu su, Nosu su) to a nominalizer, e.g. Lizu ɣe⁵⁵-tshu³³-su³³ ‘blacksmith’ (from ɣe⁵⁵ ‘iron’, tshu⁵⁵ ‘to hit, to strike’), or (2) that from the verb ‘to make’ (Lizu m(u)³⁵, Nosu m(u)³³) to an adverbializer, e.g. Lizu æ⁵⁵-zæ⁵⁵=m(u)³³ ji³⁵ ‘take care’, literally ‘go slowly’, a conventional expression of farewell). Overall, many Lizu function words have formally and functionally close counterparts in Nosu (based on Hú 2002).

The assumption of a close relationship between Lizu and Nàmùzī is corroborated by the oral history of the groups. The two groups are believed by their speakers to be distantly related (as gathered from my language consultants).

³¹ This overview is based on the list of diagnostic morphological and syntactic similarities between Nàxī and Moso in Jiāng (1993), to which I added my Shǐxīng data. Some additional features shared by Nàxī, Moso and Shǐxīng are cited, for Nàxī and Moso, from Hé and Jiāng (1985), Lidz (2006), and Yang (2009). Some similarities between Shǐxīng and Na languages are also discussed in Chirkova (2009).

(b) perfective aspect marker: Nàxī siə³³, se³¹; Yǒngníng Na ze³³; Shǐxīng sə. For example, ‘have eaten’: Nàxī ndzu³³se³¹; Yǒngníng Na dzu⁵⁵ze³¹; Shǐxīng lɜ³³-dzɜ³³=sə⁵⁵ (with the perfective prefix lɜ-)

(c) possibly, also the experiential marker: Nàxī dzi³³, Yǒngníng Na dzi³³, Shǐxīng dzɜ. For example, ‘have once eaten’: Nàxī ndzu³³dzi³³, Yǒngníng Na dzu⁵⁵dzi³³, Shǐxīng dzɜ³³=dzɜ⁵⁵

(3) Nominalizer, grammaticalized in Moso and Shǐxīng from the morpheme for ‘person’. For example, ‘wood-cutter’: Yǒngníng Na su³³da³¹xī³³ (from xī³³ ‘person’), Shǐxīng sɿ⁵⁵-tj³³-hɿ³³ (from hɿ⁵⁵ ‘person’).

(4) Reduplication in adjectives with the prefix a- (to signal intensification). For example, Lìjiāng mbe³³ ‘thin’ vs. ə³³mbe³³mbe¹³ ‘very thin’; Guābié bi³³ ‘thin’ vs. a³¹bi⁵⁵bi³³ ‘very thin’, Shǐxīng bu³⁵ ‘thin’ vs. a³³-bu³³-bu⁵⁵ ‘very thin’.

(5) Suppletive forms of the verbs ‘to come’ and ‘to go’:

	Lìjiāng Nàxī	Yǒngníng Na	Shǐxīng
‘to come’			
past	tshw ³¹	tshw ³¹	tɕhũ ³⁵
non-past	tshw ³¹ , lu ³³ , lə ³³	zi ³³ , zu ³³	lɜ ⁵⁵ , liu ³⁵
imperative	lu ³³	zu ³³	liu ³⁵
‘to go’			
non-past	bu ³³ , bə ³¹	bi ³³	bi ³⁵
past	khw ⁵⁵ , xw ³³ , xə ¹³	khe ¹³ , xw ³³	xa ³⁵
imperative	fa ³³	xv ³³	xu ³⁵

(6) Some continuity in the system of existential verbs (even though that in Shǐxīng is more elaborate than those in Nàxī and Moso, with some unrelated forms), namely: ‘to have, to possess; to exist’: Lìjiāng Nàxī dzy³³ (inanimate entities), ndzy³³ (animate entities); Yǒngníng Na dzo³³; Shǐxīng dzō³⁵ (inanimate entities), jɿ³⁵ (animate entities); ‘to exist (inside a container)’: Lìjiāng Nàxī zi³³, Yǒngníng Na zi³³, Shǐxīng khu³⁵; ‘to exist (attached to an entity)’: Lìjiāng Nàxī dzu³¹, Yǒngníng Na di³¹, Shǐxīng dzi³⁵.

Some additional features include:

(1) grammaticalization of the verb ‘to make’ into an adverbializer, e.g. Lijiāng t̚shu³¹ be³³ ndzi³³ ‘go quickly’ (from be³³ ‘to make’), Shǐxīng t̚shō³⁵ bɜ³³=si³³# phæ̃³⁵ ‘precipitously escape’ (from bɜ³⁵ ‘to make’, followed by the clause connector si)

(2) delimitative verbal prefix related to the numeral ‘one’, Yǒngníng Na dt³³- from dt³³ ‘one’ (Lidz 2006), Shǐxīng dzi- from dzī³⁵ ‘one’. For example, Yǒngníng Na dt³³-di¹³ ‘to follow (for a while)’; Shixing dzi³³-ǰī⁵⁵ ‘to have a look’.

At the same time, internal divergence between Shǐxīng and Na languages is manifested in the lack of agreement between lexical and some grammatical subsystems.³² Divergences between grammatical subsystems are furthermore essentially restricted to those systems that appear to be particularly prone to restructuring in the Mùlǐ area, as observed in its languages of known genetic affiliation, or to those salient phenomena that are exclusive to the area, namely:

(1) Shǐxīng’s system of case markers is more developed than that in other Na languages. More precisely, Shǐxīng has more cases than Nàxī and Moso; and case markers that overlap between these languages appear unrelated.

(2) Shǐxīng has a highly reduced classifier system with only two sortal classifiers (one general and one for elongated entities, see §2.2). The development of its classifier system furthermore fits within the context of the overall south-north gradual reduction of classifier systems in Na languages (see footnote 28).

(3) Shǐxīng also has a better developed (than in other Na varieties) system of existential (locative) verbs.

(4) Shǐxīng has directional prefixes.

(5) Shǐxīng has a tone system characterized by culminativity (as discussed in detail in Chirkova and Michaud 2009).

³² While systematic lexical comparison between Shǐxīng and Na languages is yet to be undertaken, pending also a rigorous phonological analysis of Shǐxīng, two observations regarding shared lexical items between Shǐxīng and Na languages can be made. First, on an impressionistic level, lexical similarities between these languages are substantial, but they are expected to be significantly fewer than 60%, as shared between Nàxī and Moso. Notably, in comparison to the latter languages, Shǐxīng has an extensive number of Tibetan and Púmǐ loans. Second, some diagnostic regular correspondences between Nàxī and Moso (such as that between a prenasalized initial in Nàxī and a non-nasal initial in Moso) may be paralleled in Shǐxīng (a non-nasal initial followed by a nasalized vowel). For example, ‘bridge’: Nàxī ndzo³¹, Moso dzo³³, Shǐxīng zē̃⁵⁵; ‘to sit; to live’: Nàxī ndzu³¹, Moso dzu¹³, Shǐxīng dzū⁵⁵; ‘short’: Nàxī ndər³³, Moso da³³, dər³³; Shǐxīng d ɛ̃³⁵.

The reason for these dissimilarities between Shǐxīng and its supposed Na relatives outside of the area is likely to be contact influence from the areal neighbors of Shǐxīng, most importantly, its closest geographical neighbors in Shuǐluò Tibetan and Púmǐ. So, as a first approximation, Shǐxīng can be hypothesized to be a Na language that has undergone considerable restructuring in Mùlǐ.³³

More fine-grained studies, including the largest possible range and number of similarities between Shǐxīng and Na, accompanied by careful lexical comparisons, will reveal whether these languages form one natural group and will further lead to the conclusion of the precise nature of the relationship between them (genetic or contact-induced).

4. Subgrouping in the Qiangic area and Sino-Tibetan at large

It is a lasting contribution of Sūn Hóngkǎi to the field of Sino-Tibetan studies to single out the Qiangic area, and to identify some of its key features, while focusing on its languages of uncertain affiliation. Follow-up investigations, such as the ongoing work on the languages of Mùlǐ, as discussed presently, suggest that the initial interpretation of the nature of similarities between the more obscure languages of the Qiangic area as genetic requires adjustment, and that a coherent understanding of the relationship between these languages critically relies on that of the complex multi-lingual area, in which they are spoken. To adduce an explanation to the many salient areal features, some of which are truly unique in the Sino-Tibetan context, we will need to move beyond the usual practice of restricting the scope of studied languages to those labeled Qiangic. This new approach will increase both the number of concerned languages and the number of relevant areal features. As a result, Báimǎ Tibetan will rightfully reclaim its place as a valid and telling member of the Qiangic *Sprachbund*.

Needless to say, the unique features of the Qiangic area are likely to provide new insights into the history of Sino-Tibetan at large. Not surprisingly, related comparative and reconstruction work can only be revealing, if it is performed on coherent, natural groups, whereas the issue of the precise subgrouping in the complex Qiangic area is far from resolved, as I have tried to show.

On a broader scale, the problem of subgrouping, as discussed in relation to Qiangic, is emblematic for Sino-Tibetan at large, where the precise subgrouping of constituents remains in many cases controversial. In addition to outstanding challenges of subgrouping in historical linguistics in general,³⁴ added challenges to subgrouping in the Sino-Tibetan context comprise (Handel 2008:426, 431, 435):

³³ Notably, the two putative Na languages of Mùlǐ, Laze and Shǐxīng, both exhibit salient areal Mùlǐ features and differ essentially in their respective degree of restructuring. Namely, Shǐxīng is more profoundly (lexically, prosodically and syntactically) restructured than Laze. As a first approximation, this may be simply due to a longer time of residence in Mùlǐ, and consequently, a longer time of exposure to convergence: ca. 500 years for the Shǐxīng group (Xiè 1992:48) vs. ca. 200 years for the Laze (Guō and Hé 1994:6-7).

³⁴ These challenges include lack of objective criteria to distinguish retentions from innovations, absence of a theory of relative naturalness of sound change and absence of objective criteria to factor out diffusion or identical independent change (see Harrison 2003:232-239 for discussion).

(1) absence of a complete reconstruction of Proto-Sino-Tibetan, that makes it difficult to identify shared innovations with certainty between proposed subgroups (at the same time, a complete reconstruction in turn requires a clear subgrouping, without which it is difficult to properly weight and evaluate data from the daughter languages)

(2) insufficient documentation of many Sino-Tibetan languages

(3) complex migration histories and areal convergence, obscuring recognition of genetic relationships (e.g. LaPolla 2001)

(4) existence of many languages with monosyllabic roots that increases the probability of chance resemblances leading to the false identification of cognates.

Yet one more momentous challenge of the Sino-Tibetan family is the pervasive absence of previous attestations (direct historical evidence) of many of its languages.

Solutions to these fundamental problems may or may not be found. For instance, no previous attestations of genetically obscure languages of the Qiangic area are in all likelihood forthcoming. While steadily working towards solutions and hoping that some obstacles can eventually be overcome, in my opinion, studies on the linguistic history of Sino-Tibetan languages have in the meantime everything to gain by turning to a broad range and variety of available and steadily growing body of empirical evidence, including that, that is normally discarded by the conventional comparative method (such as typological features) for many clues that they can provide on specific scenarios of diachronic change.

The initial phase of classification of Sino-Tibetan languages appears now complete. It relies on “classification from above” (family into subgroups). It is based on few criteria (cognate vocabulary, common innovations) to allow isolation of groups of a manageable size for study. Due to the use of few criteria, this type of classification unavoidably runs the risk of yielding groups that are not natural (not monophyletic), and hence are neither complete nor sufficiently discrete to be used for precise purposes, such as, for instance, reconstruction work. A consequent concern is to refine proposed subgroups to ensure completeness and accuracy of information that can be obtained from each of them on their respective ancestral states. For my part, this can be profitably done by changing the approach to that of “classification from below” (languages to subgroups), especially at the often fuzzy boundaries of already proposed subgroups, to arrive at groups that are defined by overall synchronic similarities and that are, for that reason, likely to be monophyletic. An added bonus of this venture is that definition of each natural group is intrinsically relational to that of its kin. Consequently, pursuit of boundaries of, for instance, *natural* Qiang-ness is bound to shed light on the nature, scope, and history of many of its neighboring languages and subgroups.

Appendix: Features shared by the four Qiangic languages of Mùlǐ (Púmǐ, Lizu, Nàmùzī, Shǐxīng) exemplified and compared to Kami Tibetan (related to §§2.1 and 2.3)

(1) Pronunciation of the vowel /u/ (in Púmǐ ə) as a syllabic bilabial trill after bilabial and apical stops. For example, Lizu tu⁵⁵ [tɕ⁵⁵] ‘bean’, Nàmùzī tu³⁵ [tɕ³⁵] ‘to slaughter’, Shǐxīng du⁵⁵ [dɕ⁵⁵] ‘oil’, Púmǐ pə⁵⁵ [pɕ⁵⁵] ‘to dig’. This feature is not attested in Kami.

(2) Uvular phonemes: (a) contrastive with velars, as in Lizu, Nàmùzī and Shǐxīng, e.g. Shǐxīng khɜ⁵⁵ ‘foot’ vs. qhɜ⁵⁵ ‘excrement’; khuɜ⁵⁵ ‘to exist (inside a container)’ vs. qhuɜ⁵⁵ ‘to steal’, or (b) allophones of velar fricatives, as in Púmǐ and Kami Tibetan. For example, Púmǐ: xa²⁴ [χɑ²⁴] ‘to bite’, ɣã⁵⁵ [ɣã⁵⁵] ‘fang’; Kami, xo⁵⁵ [χɔ⁵⁵] ‘meat, flesh’ (WT *sha*), xu¹³ [χu¹³] ‘yoghurt’ (WT *zho*).

(3) Common principles of prosodic organization: tone systems characterized by culminativity—a restriction of not more than one pronounced lexical tone per prosodic word with one tonal assignment (mostly restricted to the first syllable of the word) affecting much or all of the prosodic word, see Chirkova and Michaud (2009) for the prosodic organization of Shǐxīng, Chirkova (2008) for the prosodic organization of Lizu, and Chirkova (submitted) for the prosodic organization of Kami.

(4) Identical principles of word-formation, including:

(a) Extensive use of reduplication. Reduplication involving dynamic verbs expresses frequentative or iterative meaning, e.g. Lizu kæ⁵³ ‘to hit’ vs. kæ⁵⁵-kæ⁵³ ‘to fight’, Nàmùzī qæ³¹-qæ⁵³ ‘to scratch an itch’, Shǐxīng dzõ³³-dzõ⁵⁵ ‘to run’. An additional meaning of reduplication is reciprocity, e.g. Shǐxīng qao³³-qao⁵⁵ ‘to help (each other)’. The meaning of reduplication for stative verbs (adjectives) is intensification, e.g. Lizu zu⁵⁵ ‘thick’ vs. zu⁵⁵-zu⁵⁵ ‘(very) thick’; Shǐxīng guɜ⁵⁵-guɜ⁵⁵ ‘(very) round’; Kami ɜ¹³ ‘light’ vs. ɜ³³-ɜ⁵⁵ ‘(very) light’.

(b) Compounding, e.g. Nàmùzī ɰie⁵⁵-bie³¹# lo⁵⁵-χo³¹ ‘carrot’, from ɰie⁵⁵-bie⁵⁵ ‘turnip’, lo⁵⁵-χo³¹ ‘red’; Lizu tsho⁵⁵-mo⁵⁵ ‘elderly person’, from tsho⁵⁵ ‘person’, the³³-mo⁵⁵ ‘old’ (with the directional prefix the-); Shǐxīng tshɜ⁵⁵-χo³³ ‘salty’, from tshɜ⁵³ ‘salt’, qhao⁵⁵-sõ³³ ‘bitter’ (the initial qh- in ‘bitter’ undergoes lenition in the intervocalic position, see Chirkova 2009)

(3) Affixation. This type comprises:

- (i) Kinship prefix *a-* (older kin), e.g. Lizu and Nàmùzī: æ⁵⁵-jæ⁵⁵ ‘older sibling (brother or sister)’, Shǐxīng and Kami: a³³-ju⁵⁵ ‘older brother’, a³³-zǐ⁵⁵ ‘older sister’
- (ii) Diminutive suffix derived from the morpheme for ‘child’ or ‘son’:

	Diminutive suffix	Meaning	Examples
Púmǐ	tsuə ⁵⁵	‘son’	mɜ ¹¹ tsə ⁵⁵ ‘cat’: mɜ ¹¹ tsə ⁵⁵ tsuə ⁵⁵ ‘kitten’
Lizu	1. je	‘small’	tʰe ⁵⁵ ‘dog’: tʰe ⁵⁵ -je ³³ ‘pup’
	2. jæ ³³ -qɑ ⁵³	‘child’	mu ³³ -tsə ⁵³ ‘cat’: mu ³³ -tsə ³³ jæ ³³ -qɑ ⁵³ ‘kitten’
Nàmùzī	zə ⁵⁵	‘child’	jo ⁵⁵ ‘sheep’: jo ⁵⁵ -zə ⁵⁵ ‘lamb’
Shǐxīng	zō ³⁵	‘child, male’	ma ³³ -zə ⁵⁵ ‘cat’: ma ³³ -zə ³³ -zō ⁵⁵ ‘kitten’
Kami	1. ka	‘child’	tʃhə ⁵⁵ ‘dog’: tʃhə ³³ -ka ⁵⁵ ‘pup’ wu ⁵⁵ -li ⁵⁵ ‘cat’: wu ³³ -ka ⁵⁵ ‘kitten’
	2. tʃhə (WT <i>phrug</i>)	‘child’	wu ⁵⁵ -li ⁵⁵ ‘cat’: wu ³³ -tʃhə ⁵⁵ ‘kitten’

- (iii) Gender suffixes for animals (in Kami, prefixes):

	Female	Male	Examples
Púmǐ	mǎ	pu	mɜ ¹¹ tsə ⁵⁵ ‘cat’: mɜ ¹¹ tsə ⁵⁵ mǎ ⁵⁵ ‘female cat’ khə ¹¹ dza ²⁴ ‘dog’: khǐə ⁵⁵ mǎ ⁵⁵ ‘bitch, female dog’; khǐə ¹¹ pu ⁵⁵ ‘male dog’
Lizu	mæ	1. nphe 2. bu	tʰe ⁵⁵ ‘dog’: tʰe ⁵⁵ -mæ ³³ ‘bitch, female dog’; tʰe ⁵⁵ -nphe ³³ ‘male dog’ mu ³³ -tsə ⁵⁵ ‘cat’: mu ³³ -tsə ³³ -mæ ⁵⁵ ‘female cat’; mu ³³ -tsə ³³ -bu ⁵⁵ ‘male dog’
Nàmùzī	mie	1.(n)phu 2. (ta ⁵⁵ -)bu ⁵⁵	fræ ⁵⁵ ‘chicken’: fræ ⁵⁵ -mie ⁵⁵ ‘hen’; fræ ⁵⁵ -phu ⁵⁵ ‘rooster’ χa ³³ -la ⁵⁵ ‘cat’: χa ³³ -la ⁵⁵ -a ⁵⁵ -mie ⁵⁵ ‘female cat’; χa ³³ -la ⁵⁵ ta ⁵⁵ -bu ⁵⁵ ‘male dog’
Shǐxīng	mi	phɜ	khu ³³ ‘dog’: khu ⁵⁵ -mi ³³ ‘bitch, female dog’; khu ⁵⁵ -phɜ ³³ ‘male dog’ ma ³³ -zə ⁵⁵ ‘cat’: ma ³³ -zə ³³ -mi ⁵⁵ ‘female cat’; ma ³³ -zə ³³ -phɜ ⁵⁵ ‘male dog’
Kami	mu	phu	tʃhə ⁵⁵ ‘dog’: mu ³³ -tʃhə ⁵⁵ ‘bitch’; phu ³³ -tʃhə ⁵⁵ ‘male dog’ wu ⁵⁵ -li ⁵⁵ ‘cat’: mu ³³ -li ⁵⁵ ‘female cat’; phu ³³ -li ⁵⁵ ‘male cat’

(5) Case marking governed by empathy hierarchy with, most importantly, agentive, animate patient, genitive and locative case markers, namely (Kami case markers are currently omitted, as requiring more investigation):

	Agentive	Animate patient	Locative	Genitive
Púmǐ	niɛ	bie	nə	ɣ ₃
Lizu		æ	ke	ji
Nàmùzī	ɲi ⁵⁵	dæ ³⁵		ɲi ⁵⁵ ~ji ³¹
Shǐxīng	rĕ	sə	ɬō, nɔ, kɜ, lɜ~la	ji

In addition, Lizu and Shǐxīng have topic markers, Lizu lə; Shǐxīng: zə and ne.

(6) Numeral classifiers (see §2.2)

Kami has an incipient system of numeral classifiers, in which classifiers are optional and restricted to animate nouns. Consider, for instance, the optional use of the (incipient) classifier ngu⁵⁵ (WT *mgo* ‘head’) in the expression ɲə³³-ngu⁵⁵ tɕi¹³ (*mi mgo gcig*) ‘one person’.

(7) Directional Prefixes:

	up	down	inside	outside	towards oneself	from oneself
Púmǐ	tə ⁵⁵ -	nɜ-	hɜ-	khə-	də-	thɜ-
Lizu	de-	ne-	khe-	the-		
Nàmùzī	lo-	mi-		tɕhi-		
Shǐxīng	dzi-	miɛ-	khu-	bə-		
Kami	jæ-	mæ-			tshæ-	phæ-

In addition, Shǐxīng has an aspectual (perfective) prefix lɜ-

(8) Past/non-past distinction (suppletive forms) in some high frequency verbs and nominalization markers. Consider, for instance, past and non-past stems of the verb ‘to go’:

	Past stem	Non-past stem
Púmǐ	ʂə ⁵¹	ɕə ⁵¹
Lizu	dæ ³⁵	ji ³⁵
Nàmùzī	hũ ⁵⁵	bie ³⁵
Shǐxīng	xə ³⁵	bi ³⁵
Kami	shɔ ⁵⁵ (<i>song</i>) ³⁵	ndzu ¹³ (<i>gro</i>)

³⁵ The form shɔ⁵⁵ (*song*) is both past and imperative.

In addition, patient nominalizers in Lizu and Shǐxīng have distinct past and non-past forms, namely, in Lizu: (a) past -mi, e.g. ne³³-dzə⁵⁵=mi³⁵ ‘those that have been eaten’, and (b) non-past -ly, e.g. dzə³³-ly⁵⁵ ‘edibles, things to eat’. In Shǐxīng: (a) past -li, e.g. dzə⁵⁵=li⁵⁵# zǒ³³ ni⁵⁵# bi³³-tsh³⁵ ‘rice and bacon that he used to have’, and (b) non-past -g₃, e.g. dzə³³=g₃⁵⁵ ‘edibles, things to eat’.

(9) Multiple existential verbs:

Existential verb	Púmǐ	Lizu	Nàmùzī	Shǐxīng
to have, to possess	bō ⁵¹	bo ³⁵	bo ⁵⁵	dzō ³⁵
to exist (of animate entities)	zɛ ⁵¹	dzo ⁵⁵	dzo ⁵⁵	ji ³⁵
to exist (of inanimate entities)		hæ ³⁵	ndzæ ³¹	dzō ³⁵
to exist (of movable entities)		dzuæ ³⁵	zə ³¹	
to exist (inside a container)	kui ⁵¹ or tej ⁵¹	dze ⁵⁵		khu ³⁵
to exist (attached to an entity)	diã ⁵¹			dzi ³⁵
to exist (of abstract entities)	ɕi ²⁴	ne ³⁵	dzə ⁵⁵ -gi ⁵⁵	

Existential verbs in Kami fall into two contrastive types, on the one hand, those that belong to the personal sphere of the speaker (egophoric), and, on the other hand, those that do not. For example, for the verb ‘to exist; to be’, the egophoric form is ndə¹³ (*‘dug*) and the non-egophoric form is ɲō⁵⁵ (*snang*); for the verb ‘to have, to possess’, the egophoric forms are zu¹³ (*yod*) (old knowledge) and zã¹³ (*yod.?*) (new knowledge), whereas the non-egophoric form is again ɲō⁵⁵ (*snang*).

Abbreviations

- indicates that the syllables that a dash connects constitute one single word
- ~ indicates free variation between two forms
- * unattested form which has been historically reconstructed
- ? indicates a morpheme whose meaning is unclear
- # indicates a juncture between two tonal domains
- = separates an enclitic from its host word
- 3 third person singular pronoun
- PRF perfective
- PST Proto-Sino-Tibetan
- WT Written Tibetan

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