## Stem Alternations in Pingwu Baima

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This presentation focuses on stem alternations in the Pingwu variety of Baima (ISO-639 bqh), a little-studied Tibetic language of Southwest China. Previous studies of Pingwu Baima (Nishida & Sun 1990, Huang & Zhang 1995, Sun et al. 2007) report that some verbs have two to three different stems encoding TAM, which are linked through consonantal and/or vocalic alternations. However, given that previous studies are based on limited corpora collected chiefly through elicitation, issues related to stem alternations remain underexplored. The most important issues are (i) the range of alternating verbs (existing discussions are based on a limited number of alternating verbs, while published word lists only provide verbs in their citation form, that is, not indicating related forms for alternating verbs), and (ii) the nature of the phonological process(es) underlying stem alternations. In addition, Sun et al. (2007: 80-84, 199-201), which provides the most data and discussion on stem alternations to date, analyzes alternating verbs without reference to their Written Tibetan (WT) etymologies, which limits the usefulness of Baima data for work on Tibetan verbal morphology. The present study builds on the existing descriptions with the goals of (i) providing a more systematic study of high frequency alternating verbs in Pingwu Baima, and (ii) relating stem alternations in Pingwu Baima to WT verb morphology, so as to get a better understanding of the phonological processes through which different verb stems are derived. This work is based on recent accounts of synchronic and historical phonology of Pingwu Baima in Chirkova et al. (2021) and Chirkova (manuscript).

To attain the first goal, this study relies on recordings of 250 high frequency verbs, elicited from Mandarin as placed in carrier sentences from Dahl's (1985) TAM questionnaire. This corpus of data yields 9 verbs with three stems (IPFV, PFV, IMP), 54 verbs with two stems (IPFV vs. PFV/IMP), and 134 verbs with 1 stem. (Remaining verbs are loans from Mandarin and constructions with the light verb 'to do'.) Verbs with three stems are mostly suppletive, that is, they involve forms that are fully distinct from each other so that no specific morpho-phonological rules can be postulated for their derivation, e.g. 'make; do':  $z\hat{e}$  (IPFV),  $e\bar{e}$  (PFV), te $\bar{i}$  (IMP). Verbs with two stems, on the other hand, appear to be linked through seemingly regular phonological processes. In conformity with the description in Sun et al. (2007), the two stems—the citation stem (PFV/IMP) and the related stem (IPFV)—differ (i) in the voicing and prenasalization of the initial consonant (e.g. 'mislay':  $p\hat{o} > mb\hat{o}$ ) (27 verbs), (ii) in the vowel and tone (e.g. 'buy':  $py\bar{a} > p\hat{o}$ ) (18 verbs), (iii) in a combination of consonantal, vocalic, and tonal changes (e.g. 'cut with scissors':  $ts\bar{e} > ndz\hat{a}$ ) (9 verbs).

To attain the second goal, Baima verbs in our study are considered in relation to their WT etymologies (based on Bielmeier 2018). In Pingwu Baima verbs with two stems, the citation PFV/IMP stem corresponds to the WT past stem. The related imperfective stem corresponds the WT present stem. Regular sound correspondences between Pingwu Baima and WT forms help to reduce all surface consonantal and/or vocalic changes in verbs with two stems to just two processes: (i) addition of the *-s* suffix for the citation stem (reflected as a mid tone and vowel change, e.g. 'buy': pyō, WT *nyos*; 'cut with scissors': tşē, WT *dras*; 'dig': kyō, WT *brkos*), unless the suffix *-s* is absent in the corresponding WT form (e.g. after coronal finals, as in 'blow': pô, WT *bor*); and (ii) voicing with a nasal prefix for the imperfective stem (reflected as prenasalisation of the initial consonant, e.g. 'blow': <sup>m</sup>bô, WT *'bor*; 'cut with scissors': <sup>n</sup>dzâ, WT *'dra*), unless prefixation is phonologically impossible in the corresponding WT form (before nasal initials, e.g. 'buy': pô, WT *nyo*; before preinitials, e.g. 'dig': kô, WT *rko*). This paradigm is shared across transitive and intransitive verbs (cf. 'wash': teū, WT *bkrus*, <sup>n</sup>dzû, WT *'khrud*; 'die': jô, WT *shi*; <sup>n</sup>dʒô, WT *'chi*), and it also extends to some verbs that are not alternating in WT (as in 'be drunk':  $p^h\bar{e}$  vs. mbē, possibly related to WT *bams*) and verbs that do not have WT etymologies (as in 'bark': Baima kuê vs. <sup>n</sup>guê).

The concluding part of the presentation provides an overview of WT correspondences of both alternating and non-alternating verbs in the corpus to sketch the evolution of WT verb paradigms (as in Coblin 1976; Beyer 1992: 162-185; Zeisler 2004, 2015; Jacques 2012) in Pingwu Baima, also as compared to that in its close Tibetic linguistic neighbors (including gSerpa, J. Sun 2006; Khalong J. Sun 2007; Cone, Jacques 2014; Thebo, Yeung et al. manuscript).

Keywords: stem alternation, verbal morphology, Written Tibetan, Pingwu Baima, Tibeto-Burman

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