

Reviews

Hill, Nathan W. (2019). *The historical phonology of Tibetan, Burmese, and Chinese*. Cambridge: Cambridge University Press. Pp. xiv + 373.

Christopher Geissler*

Yale University

1 Introduction

The historical phonology of Tibetan, Burmese, and Chinese is a compact volume that synthesises and systematises a wide range of research on the sound changes stretching back from these three languages toward a common ancestor. One chapter for each titular language traces a series of sound changes from a documented past form of the language (Old Tibetan, Old Burmese and Middle Chinese) to the reconstructed proto-language of the subfamily, and then to the proto-language ancestral to all three (Proto-Sino-Tibetan). A fourth chapter brings these together to focus on the phonological structure of the proto-language itself. An appendix and three indexes provide easily referenced lists of sound laws and examples, and topics for future research are clearly marked at the end of each chapter.

As Hill himself states (p. 257), ‘the ambition of this work lies not in the proposal of this or that reconstruction but in a methodological reorientation of the study of Trans-Himalayan languages towards the paragon of Indo-European historical linguistics’. In this, the book succeeds admirably. This is not to say that other past and present historical research on this language family has not been valuable – far from it – but Hill’s work does represent a new level of focus on regular phonological correspondences and sound-change laws. With extensively cross-referenced evidence and falsifiable predictions, the book presents a model for how this kind of work should be done, and raises a multitude of topics for future research.

Linguists working on varieties of Burmese, Chinese, Tibetan and related languages will find the descriptions of sound changes especially helpful. It has been difficult to determine how Sino-Tibetan languages and subfamilies are related to each other, so it is crucial to work out which sound changes each language has undergone in order to determine its genetic classification. This is true for Sino-Tibetan as a whole, and for Sinitic, Bodish and Burmish languages in particular. Historical linguists, typologists and phonologists interested in sound change more generally will also find the clearly packaged sound laws helpful to their work. However, this book is not about the modern varieties of these languages. The chapters begin with Old Tibetan, Old Burmese and Middle and Old Chinese, and work back from there. Readers interested in the subsequent diversification of these languages should look elsewhere, though the context presented here may still prove valuable.

* E-mail: CHRISTOPHER.GEISSLER@YALE.EDU.

2 Format of the book

Hill joins a number of contemporary researchers in using ‘Trans-Himalayan’ to refer to the highest-level language family containing Burmese, Chinese and Tibetan. This choice, incorporated in the name of an earlier co-edited volume (*Trans-Himalayan linguistics*; Owen-Smith & Hill 2014), is a reasonable attempt to base terminology on geography, rather than on specific languages: the greatest diversity of the family is located in the Himalayan region, and geographical naming avoids highlighting some languages over others or making implications about internal subgrouping. However, since the synonymous term ‘Sino-Tibetan’ remains in wider use, it will be used in the remainder of this review.

The end matter, comprising an appendix and three indexes, is done particularly well. The appendix gives expanded lists of words exhibiting phonological correspondences between two or three of the languages, with reference to the relevant sections of the main text. An ‘Index Verborum’ provides page-number references for every lexical item cited in the text, and for words of the three titular languages, and also gives information about which cognates in other languages it is compared to. The ‘Index Rerum et Nomum’ covers topics and the names of languages and authors, and the ‘Index Legum’ provides a section number and concise description of each named sound law in the text.

Words of the three titular languages are presented in both the native orthography and a romanisation, along with a gloss. The Tibetan and Burmese transcriptions follow the Library of Congress romanisations, while Chinese is presented with Middle Chinese from Baxter (1992) and Old Chinese from Baxter & Sagart (2014), and a character number from Schuessler (2009). Other languages are presented in slightly modified IPA; the notations are clearly described in a note in the front matter.

Overall, transcriptions are intuitive and symbols are consistent across languages, and should prove familiar to those who have worked with these languages before. Readers accustomed to IPA may want to spend additional time with the phonological inventory charts near the beginning of each chapter, or to consult other sources. Previous experience with the languages is helpful in other places as well; for instance, the index of (romanised) Tibetan words is presented as ordered in the Tibetan orthography, which follows an alphabetical order different from the Latin one, and is not always based on the first letter of a word. While potentially confusing to a beginner, these conventions are designed to be consistent with other contemporary research on Sino-Tibetan.

3 Scholarly contribution

The book’s title is aptly chosen. Organising so many sound changes does make significant progress toward a reconstructed proto-language, but this book does not offer a complete reconstruction of Proto-Sino-Tibetan. Likewise, examples from languages other than Tibetan, Burmese and Chinese do appear, and provide valuable evidence, but this is fundamentally a book about how the historic forms of those three languages came to be. Hill illustrates the nature of this book’s contribution with the cognate words for ‘eight’, as derived by sound changes (p. 258): Tibetan *brgyad* < *bryat < *bryet; Old Burmese *rhyat* < *^ʔryat < *^ʔryet; Chinese 八 *peat* < *p^ʃret. That these three words share a common origin is not a new observation, but the derivation by regular sound changes is novel.

Crucially, each step is explained with clearly supported and cross-referenced sound changes to a degree not present in previous work. Clearly stated rules invite falsification: they make predictions that should apply across the lexicon, and Hill transparently presents the data and reasoning that lead to each step. Researchers with alternative hypotheses can thus compare their data with Hill's, and determine which predictions are borne out.

The example of 'eight' presented above also illustrates that the present work has not yet fully reconstructed Proto-Sino-Tibetan – nor does it pretend to. The three forms *bryet, *ʔryet and *p^sret do represent progress toward a complete reconstruction, and they invite other researchers to refine and expand upon them with data from more languages. Chinese, Burmese and Tibetan are three comparatively well-studied and well-documented languages in a huge, diverse and understudied family. They also differ from many other languages in the family in lacking extensive morphology. Characteristically, Hill is aware of this limitation, writing: 'the working hypothesis here is that the phonetic influence of defunct morphology will one day explain these complicated correspondences, but this possibility will manifest only when more languages ... such as those of the Rgyalrong and Kiranti branches, are brought within purview' (p. 212). Incorporating data from more languages from the Lolo-Burmese and Bodish branches will also help refine the intermediate reconstructions. Additionally, this type of rigorous work necessarily reveals gaps yet to be explained, and exceptions to proposed rules. Hill highlights such cases as topics for future research, such as the origin of 'Type A' and 'Type B' onset-rhyme co-occurrence patterns in Chinese, the connections between vowel changes in verb stems across the languages and a number of etyma in which Burmese preglottalised consonants exceptionally merged to their voiceless unaspirated rather than their voiceless aspirated counterparts. Where Hill expresses doubt about another author's conclusions, such disagreements are presented clearly and with an eye toward what kind of evidence might distinguish among hypotheses.

Selecting only three languages brings up the question of just what is being reconstructed. Despite differences in how Sino-Tibetan has been organised into subfamilies, most internal classifications have assigned the Chinese varieties to one primary-level branch (Sinitic) and the rest of the family, including Tibetan and Burmese, to another (Tibeto-Burman); these include Benedict (1972) and Matisoff (2003), among others (e.g. Shafer 1955, Bradley 1997, Thurgood 2003). However, this view is not universally held: van Driem (2002) places Sinitic as a branch within Tibeto-Burman, while Blench & Post (2014) group Sinitic, Bodish and Burmish as a single sub-subclade within Sino-Tibetan. The latter rightly draw attention to the uncertain position of many subgroups, particularly a number of less-studied languages from the eastern Himalayan region. However, a satisfactory answer requires the identification of shared innovations – and while the present volume only addresses three languages, it identifies many sound laws which could be used to classify other languages with respect to these three.

This publication comes at an opportune time. Extensive fieldwork efforts have produced high-quality documentation of more languages than ever before; information technology allows access to projects like the online comparative database of *The Sino-Tibetan etymological dictionary and thesaurus* (Matisoff 2015), and more types of linguistic research are generally being done on more languages. To take one exciting example, Sagart *et al.* (2019) and Zhang *et al.* (2019) apply Bayesian phylogenetic analysis to cognate sets from fifty Sino-Tibetan languages, bringing a new line of evidence to bear on the internal subgrouping of the family. While these

analyses do identify many groupings consistent with previous research, the subgroups and outgroups proposed with varying degrees of confidence present hypotheses ripe for testing with more traditional methods. *The historical phonology of Tibetan, Burmese, and Chinese* does not present an argument for whether Sinitic or West Himalayish should be considered as the first branch on the family tree, but it does represent exactly the kind of research that can adjudicate among such hypotheses. As more and more languages are brought into this time-tested and rigorous comparative method analysis and the sequences of sound changes clarified, the Sino-Tibetan tree will increasingly come into focus. With these advances using both phylogenetic tools and the comparative method, the prospects for the future of Sino-Tibetan historical research have never been brighter.

4 Chapter structure and content

Each of the first three chapters follows a common structure, focusing on one of the titular languages. They begin with a concise introduction to the language and the branch of Sino-Tibetan to which it belongs, then present the phonological changes from most recent to most ancient. Helpful 'Reprise' sections summarise these rules, restated in chronological order. A fourth chapter, 'Trans-Himalayan', brings these findings together in a discussion of the reconstructed consonants and vowels according to their syllable structure. Points of disagreement in the literature or between the author and others are discussed with illustrative evidence, and the text frequently highlights limitations in the data or analysis. Each chapter closes with a 'Diachronic mysteries' section, highlighting some of the unanswered questions raised in the chapter, but more are presented in the text as they arise. This consistent structure, clearly signalled with numbered sections and subsections, keeps the reader oriented throughout. Cross-references are greatly facilitated by the additionally numbering of each paragraph-level unit in a single sequence throughout the volume.

The first chapter, 'Tibetan', investigates the sound changes leading to Old Tibetan, the language which was spoken across the ninth-century Tibetan Empire, and was ancestral to the modern Tibetan varieties. Hill accurately distinguishes between Old Tibetan, the first form of Tibetan attested in writing, Common Tibetan, the slightly later unwritten form which can be reconstructed from modern varieties, and Classical or Written Tibetan, the subsequent written language. Since these distinctions are subtle, and the spelling of Written Tibetan is largely consistent with that of Old Tibetan, this chapter would have benefited from a more detailed discussion than is present here. On the other hand, readers unfamiliar with Tibetan will appreciate the streamlined presentation, and relevant issues and references are raised in footnotes. For example, Hill avoids an extended discussion of the Tibetan orthography and from the outset simply treats the 'prefixed letters' (*sngon hjug*) of Written Tibetan in accordance with his analysis of them as morphological prefixes. In reconstructing first from Old Tibetan to Proto-Bodish, and thence farther back, Hill uses a narrow definition of the Bodish languages: Bumthang, Kurtöp, Monpa, Dzala and Dakpa are included, but not, for example, Gurung or Tsangla. This tighter focus avoids questions about particular languages in a family where classification remains uncertain. Much of this chapter recapitulates the sound laws presented in Hill (2011), but also expands upon them. For example, he offers a novel analysis of Tibetan final *-h* (as in *mdah* 'arrow'), which generally corresponds to Middle

Chinese *-k* and Old Burmese open syllables; treating it as the result of lenition from ancestral **-kə* plausibly accounts for the correspondences, and presents a testable hypothesis.

The second chapter, on Burmese, has a similar structure, tracing sound changes from Old Burmese to Proto-Burmish, and then back to Proto-Sino-Tibetan. As I am much less familiar with Burmese, I am limited in my ability to comment on the details, but it is likely that many readers will share the experience of being less knowledgeable on one or more of the languages. From that perspective, I found the format, data and reasoning of this chapter easy to follow. If I were using this as the beginning of more extensive study of Burmese historical phonology, I believe the overview and references provided here would provide a good starting point for further research, after which it would be fruitful to return to this chapter and the examples it presents. As a relative newcomer, I am optimistic that others similarly new to one of these three languages will find the relevant chapter similarly comprehensible and informative.

The third chapter, 'Chinese', is the longest in the book: 125 pages, as compared to about 45 for the other chapters. The first task of this chapter is to situate its approach in the context both of historic Chinese texts (such as the rhymes of the *Shijing* and the phonological classification of characters in the *Xièshēng*) and of contemporary scholarship on the reconstruction of Old Chinese. For the latter, Hill largely follows the reconstruction of Baxter & Sagart (2014), though he expresses scepticism about certain points, and includes references to the work of both supporters and critics. A substantial portion of this chapter reads as a dialogue with Baxter & Sagart, including a lengthy but warranted discussion of Old Chinese pre-initials. Unlike many other sections of the book, readers unfamiliar with some of the topics in this chapter may find themselves lost in the details. The later part of this chapter more closely resembles the other chapters in structure, in that it uses comparative evidence to develop the sound changes leading from Old Chinese to Proto-Sino-Tibetan.

The fourth chapter makes use of the results of the three preceding chapters to sketch the sound system of the common proto-language. The picture that emerges is compelling: a language resembling the three daughter languages in having largely monosyllabic roots, with a frankly restrained and typologically unremarkable phonemic inventory. The reconstructions avoid the stereotypical tendency in language reconstruction to posit increasingly convoluted phoneme and syllable inventories. When the evidence offers correspondences not amenable to reconstruction, Hill points this out. This chapter is not trying to be the definitive treatment of Proto-Sino-Tibetan phonology, but the reconstruction makes the outstanding questions all the more compelling. That said, this work is fundamentally based on only three languages, among the most morphologically 'isolating' languages of the family. One wonders what the reconstructions would look like if it were based on languages with rich morphology, or on Kiranti, Karenic and Tani languages, rather than Bodic, Burmic and Sinitic ones. Still, the analysis of the well-documented languages is invaluable, and researchers will find in Hill's work a solid foundation and a source of topics for future research.

5 Conclusion

The historical phonology of Tibetan, Burmese, and Chinese is an important book, reflecting the years Hill has spent applying classical comparative method

techniques to a family where this has proven difficult. It explicitly and precisely states its goals, evidence, reasoning, findings and limitations. Readers interested in the history and reconstruction of Sino-Tibetan will appreciate the clear and extensive indexing and find a goldmine of topics for future research.

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