

REVIEW OF *TONE IN YONGNING NA: LEXICAL TONES AND MORPHOTONOLOGY* BY ALEXIS MICHAUD

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Tone in Yongning Na: Lexical Tones and Morphotonology (Berlin: Language Science Press, Studies in Diversity Linguistics 13, 2017, ISBN 978-3-946234-87-6 (hardcover)), by Alexis Michaud, describes both lexical tones and phonological tonal rules in the Naish (ISO 639-3 naic1235) Yongning Na language (ISO 639-3 nru). Michaud claims that his aim is a “detailed description of a level-tone system,” making this work a significant contribution as even among tonal Bantu language studies, as the author notes, it is rare to see entire books devoted to description of such systems. For this undertaking, Michaud has spent a tremendous amount of time over the last decade doing fieldwork on, intensively analyzing various aspects of, and writing about the phonology of Yongning Na, a Sino-Tibetan language spoken by some 47,000 people living in an area bordering Sichuan and Yunnan provinces of southwest China. Over that extended period of research, he has authored some two dozen linguistics articles on Na (including several co-authored works, mostly written in English but also in French and Chinese), a Na-English-Chinese dictionary, numerous Na language recordings efficiently laid out to facilitate study by others (in the online PanGloss collection), and now this massive 600-page volume on the Na language.

Overall Content

600 plus pages to describe the tone system of a language might seem excessive, but in reality, much more is needed to adequately explore this intensely intricate morphotonological system, as Michaud refers to the tonal phenomena in Na. The counterpart to Michaud’s book, Lidz’s massive 958-page 2010 dissertation on Yongning Na grammar, is clearly the place to seek deep understanding of the language’s syntactic and morphological properties. Indeed, Michaud suggests that his work is complementary to Lidz’s work, which covers Na grammar in depth, but not the tone issues Michaud describes. In comparison with Lidz’s 440 pages focused on Na morphosyntax, Michaud covers in a very concise (17 pages), but still functional way, Yongning Na word order essentials to better understand Na morphotonology. It is an SOV and modifier-head language with a variety of lexical grammatical elements (e.g., post-verbal particles expressing TAM, adpositions, clitics, etc.) rather than inflectional morphology, all of which interacts with Na morphotonology.

Beyond that section, the introductory background information, and the main several chapters on Yongning Na morphotonology which constitute a solid 350 pages of the book, another 50 pages cover the dynamic nature of the system and its place in typological and regional studies. Finally, the 70 pages of appendices present Na phonology and its historical and ethnological context. In the rest of this review, the focus will be on the tone issues that are the core of the book.

Na Morphotonology and Tonal Phonological Rules

To say Yongning Na morphotonology and tonal phonological rules described in Michaud’s work are complex would be an understatement. The amount of interaction between lexical, phrasal, and intonational aspects of tones in the study is intimidatingly sophisticated. In introductory sections, Michaud points out previous attempts at descriptions of tones in Na, and it appears his work is the first to deal with Na as a level-tone language with such a range of lexical and phrasal tonological rules. As the author suggests, this intricate system stretching over words and phrases is much like the complex morphology that can emerge when languages are isolated and develop naturally on their own. Thus, it is not simple to summarize the issues, but below is an attempt.

The study is mostly based on the recordings taken from one native speaker of Na, one with solid credentials as a mature, perceptive speaker who has little apparent influence of Mandarin Chinese. This latter point is significant as Mandarin has had and continues to have impact on the Na speech community. Michaud makes it clear that focusing on one speaker has its drawbacks, but he also argues this is a way to gather in-depth—and consistent—data. Variation among Na speakers is present in the community, and so for this study, one can assume at the very least that this focused data set is a consistent representation of the Na tonal system.

As contour tones are highly common in this region, one might assume Na is a language with tone contours, and indeed, Lidz in her grammar of Na uses the standard five-number system to posit that Na has four tones: high-level 55, mid-level 33, low-falling 31, and low-rising 13. A very different approach is taken in Michaud’s work. The author shows in Section 10.1.1 that Na has phonological level tones which differentiate them from “unitary contour tones...encoded as an overall shape.” Instead, Na has phonetic contours that are decomposable into level-tone units: high (H), mid (M), and low (L) tones. Moreover, monosyllabic or bisyllabic words may have one or more tones, allowing for a number of possibilities (i.e., one tone on a monosyllabic word, one tone spread over a bisyllabic word, and two tones on a monosyllabic word) which cannot occur among languages in which there is a limit of one tone per syllable. The author notes that level tones are less common among Sino-Tibetan languages, but then lists several other ST languages with level tones. Thus, level-tone languages are a small part of the linguistic landscape, with only several out of 200 plus ST languages, and not, to my knowledge, in Sinitic, Tai-Kadai, Hmong-Mien, or Austroasiatic.

Thus, Na is typologically unlike many (but not all) neighboring tonal languages in the region. In most complex contour tone languages, one expects to identify a core set of several tones and see if they undergo tonal sandhi or other non-phonemic phonetic alternations. In contrast, in Na, knowing the tones of individual words appears to do little to help one use the words with phonological-grammatical accuracy. This becomes evident when Michaud describes the six tonal categories of monosyllabic nouns in Na (see Table 1) and the eleven tone categories of bisyllabic nouns.

Tonal categories in Na are not, however, like “tones” in complex contour tone languages. In such languages, tones are realized with relatively consistent contour regardless of position, and are only changed in some languages by tone sandhi, usually a limited set of fairly regular phonological rules. Instead, tonal categories in Na can be identified by testing tonal realizations in combination with other words, as in the samples in Table 1. In it, six tonal categories of monosyllabic nouns are identified via tonal realizations (a) in isolation, (b) before copula verbs, and (c) with possessive marking. As Michaud indicates, “While the evidence used to bring out the tone categories is morphotonological (looking at the behavior of nouns in context), the tone categories are lexical.” Double slashes //...// are used to indicate underlying tonemes. The pound sign # is used to mark additional special features of tones, as described in the quick reference section. Thus, while in isolation, we see three surface tone types—LH, M, and MH—the other combinations result in different numbers of realizations.

Table 1: Sample of Tone Categories

Table 2.7a: The lexical tone categories of monosyllabic nouns.

analysis	in isolation	+COP	+POSS	//example//	meaning
// LM //	LH	L+H	L+H	bo l	pig
// LH //	LH	L+H	L+H	zæ l	leopard
// M //	M	M+L	M+M	la l	tiger
// L //	M	L+LH	L+M	jo l	sheep
// #H //	M	M+H	M+M	zwa l	horse
// MH# //	MH	M+H	M+H	tʂ^hæ l	deer

The central section on Na morphotonology describes issues focused on nouns and relevant words and issues in noun phrases (e.g., lexical tones of nouns, compound nouns, classifiers, and nouns with grammatical elements (e.g., suffixes, possessive constructions, etc.)) followed by issues of verbs and their related elements (e.g., lexical tones, prefixes, verbs plus various post-verbal morphemes, verbs plus objects,

etc.). All categories have ranges of tone categories that are similarly expansive or even more so than those of the nouns as in Table 1.

This leads to the next layer of Na tonal morphology, above the lexical level, at which point the autosegmental phonology approach of Na that Michaud applies becomes even clearer. Michaud refers to the concept of “tone groups,” which is the extent to which tone rules apply in groups of words (or more rarely, single words), which often, but not always, correspond to syntactic units. The domains of tone groups extend from monosyllabic to polysyllabic words and to compounds and multi-word phrases. The author presents a list of seven rules he has identified, mostly impacting following segments in rightward spreading. It is here that the level tone system, with the use of H (high), M (middle), and L (low), becomes more apparent. Tones spread, there is tone neutralization, and tones are assigned to syllables lacking specified tones.

Table 2: *Tone assignment rules in tone groups*

- Rule 1: L tone spreads progressively (“left-to-right”) onto syllables that are unspecified for tone.
- Rule 2: Syllables that remain unspecified for tone after the application of Rule 1 receive M tone.
- Rule 3: In tone-group-initial position, H and M are neutralized to M.
- Rule 4: The syllable following a H-tone syllable receives L tone.
- Rule 5: All syllables following a H.L or M.L sequence receive L tone.
- Rule 6: In tone-group-final position, H and M are neutralized to H if they follow a L tone.
- Rule 7: If a tone group only contains L tones, a post-lexical H tone is added to its last syllable.

In many sample sentences and phrases through each section of the book, Michaud provides IPA tone symbols indicating contour tone height of single tones and contour for two tones together. In such samples, the underlying phonological tones are in the first row, while the surface forms, after all tonal rules apply, are shown beneath them, as in Sample 1. It is not difficult for the reader to adjust to the mixture of L/M/H symbols and the visual IPA pitch-level indicators.

Sample 1: *Sentence with Underlying and Realized Tones*

- (11) dzuː˥˥-di˥˥ mɿ˥˥-dzo˥˥
 dzuː˩ -di˩ mɿ˩ dzo˩
 to_eat NMLZ NEG EXIST
 ‘there was no food’ (Seeds2.69)

Sample 1 also indicates, in parentheses at the end, the audio file where one can listen to the original sample on the PanGloss collection (<http://lacito.vjf.cnrs.fr/pangloss/>) by searching for the title, in this case “Seeds.” The option of access to recordings of speech samples to allow readers to rely not only on the author’s claims and potentially do further research is admirable and worthy of emulation in other such linguistic publications on minority languages.

Beyond showing sentences with phonemic and surface representations of tones, the author provides more detailed samples of derivations, with hypothesized stages of tone assignment, in ten or so diagrams in the book. It is through these sorts of tests that Michaud is able to clearly demonstrate evidence for both the morphotonological and phonological tonal rules as well as evidence of the claim that Na is a level-tone language. In Diagram 1, the tone of the bisyllabic input is associated the with second syllable (a lexical matter), requiring the default M tone for the now unspecified syllable (phonological rule 2), and finally a L tone for ‘year’ (phonological rule 5).

Diagram 1: Surface phonological tone to phonetic realization

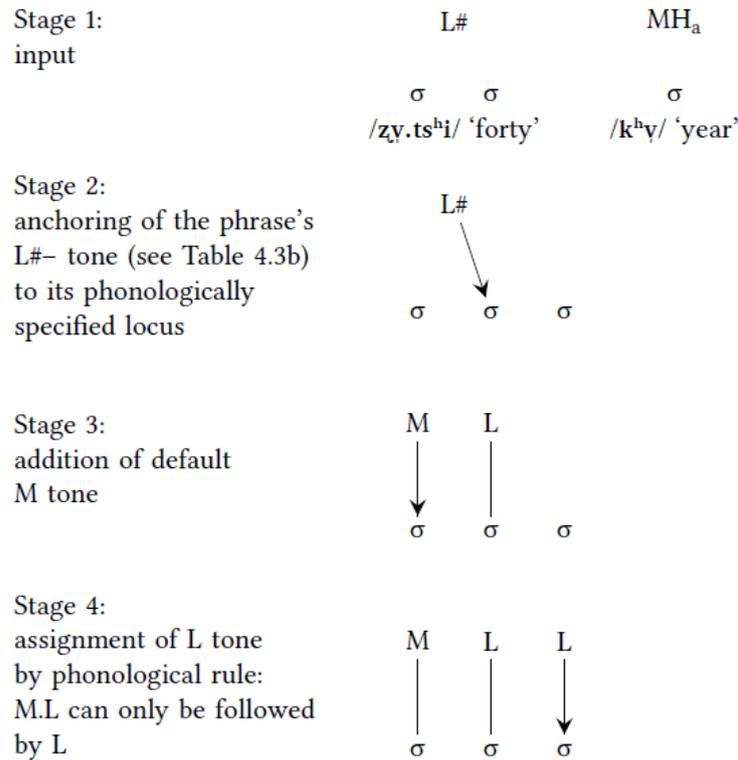


Figure 4.1: A detailed representation of tone-to-syllable association for the numeral-plus-classifier phrase /zɿtsʰi|kʰɿ/ 'forty years'.

As for tone group boundaries, noun phrases and verb phrases often form tone groups. However, there are “tonal standalones,” that is, the small number of words which are their own tone groups, and topics in sentences form tone groups. In longer sequences of words, there are options for tone group boundaries, namely, whether they group in long strings or separate into multiple parts for emphasis or other issues of information structure. Set phrases can constitute tone groups, such as proverbs or other lexical collocates, for example, sequences of three animals in the twelve-year cycle calendar.

Beyond these language internal matters, there are issues of language contact, primarily with Mandarin Chinese or dialects of it, raising the provocative question of how a level-tone language incorporates words and phrases from a complex tone language, or what influence there may be as a result of the growing amount of bilingualism. Related to this is Michaud’s “dynamic-synchronic” perspective, which is addressed mostly in Chapter 9, but which is seen in various places in the book. This approach involves understanding the synchronic details of Na morphotonology through diachronic aspects, such as analyzing irregular tone patterns and structural gaps in the tone-pattern paradigms. Later in the book, he brings in notes on typological and regional comparative issues. Altogether, these last few sections provide food for thought, though it seems each issue raised would require additional exploration and detail to provide ample statements.

Writing Style

There are necessarily many complex descriptions and details of the interacting layers of tones on words, phrases, and beyond, and these are as clear as such information can be. But there are many places in which the author makes the task of reading a pleasurable one. Michaud has paid attention to issues of written style, and in some places, there is academic enthusiasm. Also, various sections contain a great deal of general background information from dozens upon dozens of publications ranging throughout the 20th century on many languages, all listed in the 40-page bibliography. Notably, in various places in the book, to aid the reader in differentiating these two tonal typologies, the author uses information about Chinese, Vietnamese, Thai, and Tibeto-Burman languages in the region, as well as ample reference to level-tone systems in African languages, with both modern descriptions and reference to historical phonology. Interesting,

insightful quotations are offered both at the beginnings and within chapters. All of these additional writing embellishments are not trivial considering the length of the book and complexity of the content.

The coverage of Na morphotonology is organized, according to Michaud, in a manner that reflects his own research experience of sifting through the data over time. This is a reasonable notion, but though parts of summaries of overall issues are provided early in the book and in the last chapters, readers who want a quick understanding of Na morphotonology will need to grapple to obtain a clear overall view.

On another note, publishing this book through the *Language Science Press* (<http://langsci-press.org/>) is an interesting aspect of this work. Some readers may prefer to read hard-copy paper books, and it is available for a relatively modest price for such a hefty text (40 USD/EUR for a paperback and about 50 USD/EUR for a hardcopy copy). Nevertheless, the free downloadable PDF on the publisher's website also includes active links throughout, from links in the table of contents to specific sections in the book, to links within the text to other sections, to links of cited authors to their places in the bibliography. Of course, there are other means of quickly navigating PDF files, and all of this facilitates research. As a free electronic text in addition to the hard copies, it will undoubtedly be accessed by more scholars than if it had been available only in hard copy sitting in a university library.

Best Hypotheses for Now

Overall, this is a highly significant contribution to research on level-tone languages, as the author intended, though in many ways also to linguistic research on languages in the southwestern China/northern Southeast Asian region. This latter point is highlighted by the frequent reference to Southeast Asian languages in both synchronic and diachronic aspects. In line with Michaud's exploratory means of presentation, in many places, the author acknowledges the limits of understanding certain parts of Na morphotonology, and he even documents his own early hypotheses which he later discarded, thereby highlighting the exploratory nature of the research process. But while one can claim that Michaud does not have all the answers and could question aspects of his methods, analyses, and conclusions, any critics would then have to provide a better alternative. If they were able to do so, I assume Michaud would accept their progress in understanding as he has made materials available for others to continue researching. But until such time as a better analysis is put forth, Michaud's hypotheses should remain the primary working ones.

References

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