KRAUSS (2005) TONOGENESIS TABLES: IPA TRANSCRIPTION

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This paper discusses the transcription into IPA symbols of the nine tables in Michael Krauss's (2005) paper on Athabaskan tone, in an Excel spreadsheet, and searchable, to simplify correspondences across contemporary data from these languages, or for those unfamiliar with Krauss's orthography. The purpose of this paper is to provide a useable tool and a dataset to build on, to continue to develop an understanding of tonal patterns in these languages. A .pdf version is also provided for any needed comparisons between the tables.

1 Introduction

One of the most thorough

factor related to the complexity of the verbal constructions, that is, it is very difficult to compare tone patterns in the verbal complexes even within a language, never mind across the family of languages. This is due to the density of the Athabaskan lexicon;

2 The tables

The nine tables in Krauss's paper listed in (3) are constructed from a variety of sources; I refer the reader to Krauss's paper for the extensive discussion of his sources and the construction of the tables. The tables divide the noun stems into two main groups, termed 'non-constricted' and 'constricted' vowel stems. These terms are taken from Leer's (1979) work. The term 'constriction' refers to a phonation type, constriction of the larynx, that preceded the development of tone and has been observed in some records of the Athabaskan languages, Krauss refers to Morice's comments in his (1932) grammar of Carrier.

(3) Krauss' tables

Table 1 Non-constricted full-vowel stems: open (e) 4 (1Tf (2(c) 4 ul) -2 o(s) 9 (e) 4 (d) -10 (w) 2 (i) -2 (t)

Constricted 0 -10 (f) -7 (ul) -2 (l)] TJ ET Q 0.24 0 0 0.24 12 589.92cm BT 50 0 0 508763 5605 T

(5)	PRE-PA	PA
	CV'	CV':'
	CV':R'	CV':R'
	CV'C	CV':C
	CVR'	CV'R'
	CVC'	CV'C'

Thus glottal stops, glottalized obstruents (ejectives), or glottalized resonants (sonorants) in coda resulted in constricted vowels, which gave rise to the register tone system of the tone languages in Athabaskan. Kingston's (2005) paper in the same volume lays out a phonetic explanation for this tonogenesis. The reader is also referred to Table 2 in Kingston's paper.

However, the details of the Athabaskan system are complex and are related to a further reconstruction into PPA. Krauss makes these distinctions:

- 1. unmodified vowels in pre-PA became reduced vowels in PA.
- 2. modified vowels (V'

tones, and the toneless (Group 3). In Table 1, forms reconstructed with non-constricted vowels, in Group 1 (so-called

is the default tone for what are sometimes called 'toneless' syllables of the non-stems. These are found in the pre-stem domains of grammatical or inflectional type tone (though the stems in verb forms also carry grammatical tone marking without default tone, see (2)). In his gossipy section on history of the study of Athabaskan tone, Krauss points to an observation made by Sapir that the non-stem tone is 'subsidiary' tone that lost 'their distinctive tone'. This observation is crucial to understanding the tonal patterns in the verbal complex, including the development of classification and marked tones in the inflectional system; this is not under discussion in the Krauss paper but nevertheless merits attention.

The last 5 tables (Table 5a-8) concern 'constricted' vowels. The forms are reconstructed from constricted vowels in PA. These tables follow the same structure as the first set of tables.

The languages with

The contemporary Athabaskan languages have inflectional units in the verbal complex that disallow complex onset clusters, exhibiting a highly reduced inventory of onset consonants compared to stems, and with CV syllables. The vowel contrasts are also reduced to a short default vowel conditioned by phonological processes, often resulting in consonants which are broken up by the short default vowel, possibly epenthetic (McDonough 1999, 2003). These are the so-called 'underlyingly toneless' vowels of the pre-stem domain. These are the syllables that received the classification tone of the language; and these are the units of grammatical tone contrasts that may have caused the tone shifts Sapir makes reference to, including the development of the Tsuut'ina M tone. In these respects, the inflectional domains in the verbal complex have had the most extreme changes, and are crucial to understanding the tonal systems.

Krauss's paper remains an important paper on the comparative reconstruction of tone in nouns across the language family. Many of the references in Krauss's paper are from unpublished manuscripts and his reference section alone is worth study. In the paper itself, Krauss notes many exceptions to the noun patterns. Since the languages exhibit tone polarity, it is not surprising that some individual lexical items might also do this, especially given the development of aspectual tone marking in the verb stems. But the overall patterns stand as points of reference in a complex system.

Future work can add to this database; we have begun to collect sound recordings of lexical items from the Krauss wordlist from a range of Athabaskan/Dene languages and communities, which can be used to expand our understanding of the tonal systems. But equally important is the patterns of tone in the verbal complexes. By making accessible and searchable the data in this important paper, we hope this spreadsheet will encourage further investigation into the phonetics of tone among the Athabaskan/Dene languages.

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