Chimwiini phonological phrasing revisited

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A R T I C L E   I N F O

A B S T R A C T

This paper revisits the topic of phonological phrasing in Chimwiini. Previous discussion of Chimwiini phrasing has been based entirely on the evidence provided by the vowel length alternations found in the language. Unfortunately, these alternations do not allow an exhaustive account of Chimwiini phrasing.

Chimwiini accent (or High tone) provides a new source of evidence. Accent falls on the final vowel in certain morphosyntactic contexts, otherwise on the penult. This accent is phrasal in nature: it is the final or penult vowel in the last word in the phrase that bears accent. Furthermore, what counts as a phrase for the purposes of accent are exactly the same phrases that are required to account for the vowel length alternations in Chimwiini.

This accentual evidence is used to verify the general principle that a phonological phrase occurs at the edge of every (lexical) maximal projection, but it also establishes that a focused element resides at the end of a phonological phrase. The accentual evidence, particularly as it is revealed in sentences involving focus, suggest that phrasing may be recursive in Chimwiini, and that both ALIGN-XP R and WRAP-XP (constraints well known in the literature) play a role in the language.

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1. Introduction

This paper will revisit the issue of phonological phrasing in Chimwiini.[2] We will focus principally on four aspects of phrasing in this language. The first aspect has to do with the *evidence* for phrasing in Chimwiini. In the seminal papers on Chimwiini phrasing (Kisseberth and Abasheikh, 1974 (=K&A henceforth); Selkirk, 1986), vowel-length alternations provided the sole source of evidence for how words are grouped together into phrases. However, there is an even more robust source of evidence that identifies the phrase in Chimwiini: the accentual system. We will discuss this system in some detail.[3]

The second aspect of phrasing that we discuss relates to Selkirk's claim that a phonological phrase is not necessarily co-terminus with a syntactic phrase. The evidence from Chimwiini that Selkirk cited bearing on this point was not in fact entirely conclusive. We now present much stronger evidence to support this essential claim of the theory.

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  [1] Deceased.
  [2] This paper is based mostly on collaborative research between the authors in the period 1973–1978, augmented by two one month visits by Mohammad Imam Abasheikh to the United States in the 1980s. Beginning in 2009, the first-named author has been able to continue this research with a Chimwiini speaker living in the United States thanks to funding provided by the National Endowment for the Humanities grant #DEL PD-50009 ("Documentation of Chimwiini", principal investigator: Prof. Brent Henderson) as part of their program 'Documenting Endangered Languages'.
  [3] During the 1990s, the first-named author was focused on studying the tonal systems of Eastern and Southern Bantu languages and set aside his study of Chimwiini. In 2000–2001, however, he began the study of tape recordings of Chimwiini and was able to decipher this accentual system. Some general discussion of this system can be found in Kisseberth and Abasheikh (2004), Kisseberth (2005, 2010a). An extended discussion of relative clauses and their accentual pattern is provided in Kisseberth (2010b). *The Chimwiini Lexicon Exemplified* (Kisseberth and Abasheikh, 2004) contains hundreds and hundreds of example sentences with accent transcribed and phrasing indicated.

The third aspect revolves around the principles that determine phrasing in Chimwiini. Selkirk's original analysis, whereby the right edge of a maximal projection is aligned with the right edge of a phonological phrase (=ALIGN-XP R), turns out to be correct, but insufficient. The right edge of a phonological phrase occurs in a variety of other locations besides the right edge of a maximal projection. We discuss some of these situations. Perhaps the most significant of these other situations has to do with the effects of focus. The role of focus, of course, has been a central concern of studies in phrasing ever since Kanerva's (1990a,b) work on Chichewa and Truckenbrodt's (1999) reanalysis; other papers dealing with focus in Bantu languages include: Downing (2002, 2006), Downing et al. (2004), Hyman (1999), and Zerbian (2004). It is thus not particularly surprising that focus is important to Chimwiini phrasing.

The fourth aspect of phrasing that we explore is related to the constraint WRAP-XP proposed in Truckenbrodt (1995, 1999). WRAP-XP requires that the elements inside an XP be located inside a single phonological phrase. Truckenbrodt proposes that a language can satisfy both ALIGN-XP R and WRAP-XP at the same time by allowing recursive phrasing. We show that some complex facts in the Chimwiini accentual system find a solution in just this approach. These facts also contribute to a better understanding of the constraint ALIGN-FOCUS R proposed by Truckenbrodt.

This paper adopts Selkirk's (1986) proposal that certain fundamental interactions between phonology and syntax are best understood in terms of analyzing sentences exhaustively into a sequence of "phonological" (or "prosodic") phrases where the phrasing is determined by aligning the right or left edge of a phonological phrase with the right or left edge of a syntactic unit such as a (lexical) maximal projection or a (lexical) phrase head. In this "indirect-reference" model of the phonology–syntax interface, some phonological principles will operate inside such phrases or will be triggered by phonological elements being located with reference to the beginnings or ends of these phrases. We also adopt the extension of Selkirk's proposal to include interactions between phonology and other aspects of grammar besides syntax in its narrowest sense, e.g. notions of focus or discourse structure or even style. The recognition of the possibility of competition among phrasing principles naturally leads to the adoption of an Optimality-Theoretic framework (cf. Selkirk, 1995, 2000; Truckenbrodt, 1999).

Our focus in this paper is on the accentual system, and as a consequence we only briefly summarize the evidence for phrasing provided by vowel length alternations. The reader is referred to K&A and Selkirk (1986) for more extensive discussion of this evidence and its analysis.

2. Chimwiini: a brief review

Chimwiini is a Bantu language very closely related to Kiswahili; indeed, sometimes it is regarded simply as a Kiswahili dialect, but it differs from Kiswahili phonologically precisely in the matters that are the concerns of this paper (the vowel length system, the accentual system).[4] The language has been spoken in the town of Brava in southern Somalia for centuries. The late Mohammad Imam Abasheikh estimated the number of speakers at 10,000 when we first initiated our work in 1973. Subsequently, many ethnic Somalis were relocated in Brava, and in the 1990s many of the original inhabitants of the town fled the raging civil war in Somalia, going to camps in Kenya and seeking refuge elsewhere. Today there are substantial communities in the United States (particularly in Columbus and Atlanta, each city having maybe two thousand speakers) as well as the United Kingdom (particularly in London and Manchester) and Kenya (particularly in Mombasa).[5]

In K&A we showed that in Chimwiini there are underlying contrasts between long and short vowels, as well as phonological processes that create long vowels. We also showed that long vowels may occur on the surface only in two positions: the penult or the antepenult (but in antepenult position just when the penult is short). Whenever a long vowel, whether underlying or predicted by one of the vowel lengthening principles, occurs in some other environment, it is shortened. Furthermore, we showed that the notion "penult" and "antepenult" are not with reference to the word but rather the phonological phrase.

Selkirk (1986) advanced the analysis of Chimwiini in two distinct ways. First of all, she gave an analysis that made sense out of the vowel length data from Chimwiini. Specifically, she suggested that Chimwiini has a system of "abstract stress" (abstract in the sense that there is no specific phonetic manifestation that identifies the stressed syllable, and the stress that is involved plays no role whatsoever in the intonational system of the language) where stress is assigned in accordance with the so-called Latin Stress Rule. This rule stresses the penult syllable if that syllable is "heavy" (bimoraic), otherwise it stresses the antepenult. If the phrase has only two syllables, the penult is stressed regardless of weight. The stressed syllable has no necessary phonetic correlate. It is sometimes bimoraic, but sometimes it is not. It is sometimes high-pitched (see the discussion of pitch below), but sometimes it is not. The one essential fact is this: a bimoriac (long) vowel in Chimwiini is possible only if it is located in the stressed syllable. A syllable that is not stressed cannot be long; any underlying long vowel or any predicted long vowel will surface as short if it is not stressed (It should be noted that Hayes (1986) gave a similar analysis.).

As stated above, this stress system is a phrasal system. When calculating the location of stress, one looks first for the penult syllable in the phrase, without concern for word structure at all. If the penult is short, then stress is assigned to the antepenult, again, without concern for the word structure in the phrase.

The second advance that Selkirk made with reference to Chimwiini phrasing is that she identified the following regularity: the right edges of (lexical) maximal projections are also the right edges of phonological phrases. Although this insight was initially expressed in terms of a parametric approach, we will use the Optimality Theoretic approach and identify

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[4] For discussion of Chimwiini in its Swahili context, see Nurse (1982, 1985, 1991) and Nurse and Hinnebusch (1993).
[5] See Nurse (2010) for some discussion of the decline of Bantu languages in Somalia.