ASPECTS OF THE PHONETIC AND PHONOLOGICAL STRUCTURE OF THE G|UI LANGUAGE

Hiroshi Nakagawa

ABSTRACT

This study describes selected aspects of the phonetic and phonological structure of the G|ui language, a poorly documented endangered Khoe (Central Khoisan) language spoken in Botwana. It conducts instrumental phonetic investigations, namely analyses of palatograms, linguograms, aerodynamic recordings, sound spectrograms, spectra, waveforms, and pitch measurements, in order to provide an objective basis for the detailed description of phonetic features of consonants, vowels, and tones. The description includes phonetic and phonological topics, involving consonants, vowels, and tones, and in addition, it deals with relevant morphological phenomena, such as the compound verb, verbal reduplication and verbal suffixes.

This research also explores some theoretical issues, such as the unitary nature of clicks and their accompaniments, the integration of the clicks and non-clicks within a single set of features, the correct interpretation of tonal structure. Two types of historical sound shifts are also dealt with: namely, palatalization which is involved in the non-click consonant system, and the click replacement which is involved in the click consonant system. In addition to the phonetic and phonological topics, selected aspects of the sociolinguistic profile of this endangered language are also documented.

CHAPTER OUTLINE

Introduction

The introduction states the aim, scope, method, and importance of the present study. It also provides information on the linguistic classification of G|ui, and critically reviews the previous descriptions of this language.

Chapter 1 Sociolinguistic aspects of Glui

Like most Khoisan languages, G|ui is an endangered language. Therefore recording its sociolinguistic status is important. This chapter describes selected sociolinguistic and dialectological facts of G|ui at the pre-relocational stage, i.e. immediately before the relocation of G|ui from the former settlements in the Central Kalahari Game Reserve in 1997. The description includes the identification of three dialectal varieties of G|ui, the geographical distributions of fifteen G|ui-speaking communities, their estimated population, their dialectal affiliations, and their sociolinguistic conditions in terms of language-contact and multilingualism.

Chapter 2 Tonology

This chapter describes and discusses important aspects of the tonal structure of G|ui. Topics dealt with includes (i) the critical review of the descriptive frameworks in previous tonological studies of the best-documented Khoe language, Nama, (ii) the identification of the two tonological domains, (iii) the establishment of the tone bearing unit and the underlying tones, (iv) the interpretation of all the tonal contrasts occurring in the two domains, (v) the analyses of tonal alternations and other relevant morphophonological processes, (vi) the assessment of the two approaches to Khoe tonology with new findings concerning tonal alternations, and finally (vii) acoustic investigation of the two types of tonal contrasts. In order to prepare for an adequate descriptive framework for G|ui tonology, it is essential to revise the notion of "root" conventionally used in Nama tonology. The revised "root" will be important for describing and discussing distributions of segments in Chapters 3 and 4.

Chapter 3 Consonants

This chapter describes the consonants of G|ui. The first section outlines the descriptive framework used in this chapter, and provides information on the instrumental phonetic

techniques employed for the description. The second and the third sections present a detailed phonetic description of the consonants of G|ui. In order to facilitate the description, the non-click consonant system and the click consonant system are tentatively treated as two distinct subsystems. As will be pointed out in the course of description, there is a remarkable parallelism between the two subsystems. This parallelism is fully discussed in the final section by considering comparative data with G||ana| (i.e. the genetically closest language) concerning sound correspondences between clicks and non-clicks.

Chapter 4 Vowels

This chapter consists of five sections. The first section identifies the vowel inventory and classifies the attested vowel phonemes of G|ui. The subsequent three sections describe important phonetic details of the vowels for the three classes, i.e. the plain (i.e. non-nasal and non-pharyngealized) vowels, the nasal vowels, and the pharyngealized vowels. The final section deals with two types of distributional constraints of vowels in G|ui. One of the constraints falls into a type of constraint, the so-called Back Vowel Constraint (BVC), attested in other Khoisan languages. I present a cross-linguistic comparison of the BVC, and hypothesize an implicational hierarchy of the [+back] consonants, which explains the variation of the BVC in Khoisan languages.

Chapter 5 Phonological issues

The final chapter deals with three selected phonological issues. The first issue concerns a historical sound shift ongoing in G|ui-G||ana group languages, i.e. palatalization, which is typologically odd and would seem to lack phonetic motivation. I explore an explanation of this palatalization based on the palatographic observation of the relevant stops provided in Chapter 3. In relation to this palatalization, I also discuss the phonological patterning exhibited by both the non-click alveolar/palatal stops and the clicks in terms of their distribution in the consonant sequences.

The second issue is how the clicks and their accompaniments should be phonologically interpreted. This is the question whether they are all phonological units (the unit analysis) or some of them should be treated as consonant clusters (the cluster analysis). The systematic interpretation of G|ui presented in Chapter 3 is based on the cluster analysis. I compare my cluster analysis with two alternative analyses, namely, a unit

analysis (UA) which regards all the syllable onset as single phonemes and a radical cluster analysis (RCA) which regards more clicks as clusters than my cluster analysis. I argue that my cluster analysis is more advantageous and less problematic than the UA and the RCA for interpreting G|ui consonants. I further discuss theoretical implications of my cluster analysis for Güldemann's (2001) "cross-Khoisan" consonant chart. In addition, I apply my cluster analysis for interpreting Ju|'hoansi, another Khoisan language, which is interpreted by Miller-Okhuizen (1999, 2004) using an UA approach. I assess the adequacies of the two interpretations, and discuss the applicability of my cluster analysis to other Khoisan languages.

Finally, I deal with the issue of how to integrate the non-clicks and the clicks. In concluding this chapter, I explore what features will be required for the integration of the two classes.