

# Linguistic and music ethnography of Kalahari Khoe<sup>1)</sup>

## カラハリ・コエの言語と音楽の民族誌

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### Introduction

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Key word: Kalahari Khoe, ethnomusicology, linguistic documentation

キーワード：コイサン、民族音楽、言語ドキュメンテーション

この報告は始動したばかりの国際共同研究プロジェクト「カラハリ・コエの言語と音楽の民族誌」の概観を述べる。このプロジェクトは、ボツワナ共和国のカラハリ地域に居住する狩猟採集民のカラハリ・コエ諸語話者の言語と音楽とを対象として、言語学(コイサン言語学)と音楽学(民族音楽学)と人類学(音楽人類学・社会相互行為の人類学)の3学術領域から、フィールドワークを手法とする専門家が主要メンバーとなり、未だに謎に包まれた「ブッシュマン音楽」のベールを剥ぐことを目指す。このプロジェクトの遂行の過程で、世界初のブッシュマンの歌のアーカイブと通領域的な民族誌が編纂される。この報告では、当研究の学術上の背景、主要なトピック、方法論、研究組織、その他の関連する問題について述べる。



### Abstract

This paper presents a research proposal on the international joint-project titled Language and Music Ethnography of Kalahari Khoe. It describes the context of the project, the main research topics to be pursued, the methodology, the organization of the project team, and other relevant issues. The project aims at the first systematic integrated investigation of language and ethnomusic documentations of the Kalahari Khoe by paying special attention to the interplay between linguistic and musical structures. It carries out a linguistic and musicological documentation by targeting the language communities of the Western-Okwa group, the Ghanzi-Hanahai group, and the Tshwa group. This documentation will make an unprecedented empirical contribution to the Kalahari Khoe ethnography. Theoretical issues, such as the language-music interaction, cross-cultural comparison of music, and functions of storytelling and music in hunter-gatherer societies, will also be explored in the project. In addition, this research will make a scientific contribution to the understanding of the value of Kalahari Khoe linguistic and music resources as Botswana's cultural heritage.

### Introduction

This paper proposes a research project of the linguistic and music documentation of selected Kalahari Khoe communities. In the background of the present proposal lies our last research project titled "Linguistic documentation of selected Kalahari Khoe languages"<sup>2)</sup>, which we conducted from July 2013 to June 2018 in collaboration with linguists at the University of Botswana. The present research project will further develop this joint research with a wider range of linguistic and cultural studies by additionally introducing a new perspective of musicology. It aims at the first systematic integrated investigation of language and ethnomusic documentation of the Kalahari Khoe by paying special attention to the interplay between linguistic and musical structures.

The project plans to carry out a substantiated linguistic and musicological documentation of the targeted Kalahari Khoe languages and music. This documentation will make an unprecedented empirical contribution to the Kalahari Khoe ethnography. It will also explore theoretical issues, such as the interplay between linguistic and music structures, cross-cultural comparison of music, and functions of storytelling and music in hunter-gatherer societies. In addition, this research will make a scientific contribution to the understanding of the value of Kalahari Khoe linguistic and music resources as Botswana's cultural heritage.

The materials obtained through this research project form a database for cultural and linguistic preservation of these marginalized languages and cultures which are threatened by extinction (Batibo 2010, Batibo and Tsonope 2001, Mogara et al. 2017).

In order to carry out this trans-disciplinary project, we organize a joint-research team with investigators of a wide range of academic backgrounds, i.e. linguistics, musicology, anthropology, literature, and other related research fields. See Section 5 for detail.

### 1. Targeted language communities to be studied

The project will target the three Kalahari Khoe dialect clusters listed below.

- (1) Western-Okwa group: Glui-Glana dialect cluster
- (2) Ghanzi-Hanahai group: Naro-#Haba dialect cluster
- (3) Tshwa group: Cirecire dialect cluster

Our team includes linguistic experts working on Kalahari Khoe languages of these three clusters: H. Nakagawa, H. Ono, and R. Letsholo-Tafila for the Glui-Glana dialect cluster, A. Chebanne for the Cirecire dialect cluster, and B. Gabanamotse-Mogara and H. Nakagawa for the Naro-#Haba dialect cluster (cf. Chebanne 2014, Kari and Mogara 2016, Letsholo 2016, Letsholo and Mogara 2016, Mogara 2015, 2013, Nakagawa 2017, 2016, 2013ab, Ono 2015). These members have accumulated linguistic research outcomes on phonological, grammatical, and lexical structures, as well as on sociolinguistic and ethnolinguistic features of these clusters. Such outcomes will be the basis for our new investigation of the Kalahari Khoe text of various genres relevant to music, e.g. songs, poems, folklore, stories, caregiver-to-baby speech, etc. There is sufficient linguistic expertise to carry out the current project diligently.

### 2. Research topics

In the course of linguistic and ethnomusic documentation, this project will deal with a wide range of research topics which concern linguistics, musicology, anthropology, and their interface. The main topics are (1) to (6) below.

- (1) Linguistic and literary features of music-related text
- (2) Interaction between linguistic and music structures
- (3) Mechanism of social inheritance relating to language and music
- (4) Ethnography of music structure and performance

(5) Cross-cultural comparison of music

(6) Language-music documentation as applied research

The following subsections outline these topics indicating which team members are in charge of each topic.

### 2.1. Linguistic and literary features of music-related text

In Kalahari Khoe cultures, musicality is observed in various types of genres from songs, to poetry and nursery rhymes, to folklore, to stories (whether fictional or nonfictional), to parent-to-baby soothing, and even to everyday conversations. This project deals with Kalahari Khoe texts of such a wide range of genres, and will reveal their structural and functional features from linguistic, sociolinguistic (Batibo 2015, Mogara and Batibo 2016), and literary points of view.

H. Nakagawa and H. Ono will pursue the structural linguistic investigation in collaboration with R. Letsholo-Tafila and A. Chebanne. The sociolinguistic investigation will be carried out by B. Gabanamotse-Mogara, and H. Batibo while the literary and cultural aspects will be explored by R. O. B. Nhlekisana and P. S. Seloma focusing on the role of gender in music (cf. Nhlekisana, 2017).

### 2.2. Interaction between linguistic and music structures

The project will investigate the interplay between language and music. Of particular interest is the phonology of songs because Kalahari Khoe languages have typologically uncommon features in phonology, e.g. they have excessively complex consonant inventories, highly skewed word phonotactics, and a complex tonal system (Güldemann and Nakagawa 2018, Nakagawa 2017, 2016, 2013a, 2013b). Subtopics to be investigated here include the comparison of rhythm between phonological units (e.g. foot and mora) and music units, the correlation between them in song texts, phonology and text-setting (of particular interest in tonal behavior). This subtopic will be mainly carried out by H. Nakagawa and M. Turpin.

### 2.3. Mechanism of social inheritance relating to language and music

The project is also interested in understanding how language and music are passed on from one generation to the next. This issue will be explored from a new perspective by our team member A. Takada, who has been working on a feature of musicality, observed in the

interaction between caregivers (typically parents) and infants, particularly in the special speech style used by caregivers to soothe babies (Takada 2012). He will take charge of this research topic in collaboration with H. Nakagawa, H. Ono, and R. Letsholo-Tafila, who will investigate the linguistic data relating to child language, nursery rhymes, and songs, by taking into consideration the song-related feature shared by caregivers and children (see Section 3.5 for data-collection).

#### 2.4. Ethnography of music structure and performance

Another research topic of this project concerns the ethnography of music structure and music-related performance. The subtopic of musicological data-gathering, analysis, and its ethnographic documentation will be led by L. Barwick and M. Turpin, who are experts in ethnomusicological fieldwork method (see Section 3.2).

In addition, this project will explore the issue of the performers' view of their own music, in other words, how singers, players, and dancers understand their music structure (in terms of rhythm, melody, harmony, etc.) and performance in the Kalahari Khoe community. In order to investigate this question, the project will adopt an active participant observation approach (see Section 3.3). Y. Matsuhira will take charge of this topic in collaboration with B. L. Janie, who has worked on Kalahari Khoe healing dance (cf. Mmila and Janie 2006).

#### 2.5. Cross-cultural comparison of music

The project will research into the typological feature of Kalahari Khoe music, paying special attention to their polyrhythm. In order to investigate this issue, we will employ cross-cultural comparison of polyrhythm between Kalarari Khoe and Australian music. The two members from Sydney, L. Barwick and M. Turpin, are world-leading musicologists who have long worked on Australian polyrhythmic music, and as such they will pursue this research question.

In addition, a cross-cultural comparison within Botswana will be carried out by R. O. B. Nhlelisanana and B. L. Janie, who will look into the contact between Kalahari Khoe and Setswana songs and dances.

#### 2.6. Language-music documentation as applied research

This project is also an applied study, exploring the issue of the potential use of language

and music documentation for community engagement. J. Maruyama will take charge of this issue from an applied anthropological perspective.

### 3. Methodology

The main methods for data collection and analysis are as follows.

#### 3.1. Linguistics

During the last linguistic documentation project, we recorded substantial text data from various genres mentioned in Section 2.1 as digital audio files. By surveying these text data, we will first identify their music-related part. Then, with the assistance of Kalahari Khoe natives (i.e. speakers and music performers), we will re-analyze these data in order to elaborate its annotation to make it adequate for musicological investigation.

In addition to this elaboration of past recordings, we will further collect, analyze, and archive new text data of genres mentioned above in order to extend the linguistic database for this project.

To develop the detailed linguistic annotations of the text data, we will not only look at prosaic structural features in phonology, morphosyntax, and semantics, but also poetic conventions, such as rhyme, alliteration, meter, positions for vocables, ideophones (Nakagawa 2014), non-standard lexicon, and poetic word order, etc.

Furthermore, the project will accumulate substantial new data for grammaticography, lexicography, and text corpus building. Therefore, the project will use two field-linguistic tools, i.e. Picture-sequencing Task (San Roque et al. 2012) and Fieldworks Language Explorer (FLEx), in order to build a lexicon, a grammar, and interlinearizing text. In addition, the phonological data collection and organization will be carried out by using the phonological typology questionnaire that is designed by H. Nakagawa. The project will also use a sociolinguistic questionnaire prepared by H. Batibo and A. Chebanne in order to better understand the music-related text in the social context.

#### 3.2. Musicology<sup>3)</sup>

The project will generally use ethnographic observation and interview techniques by asking singers about their history, history of the songs, and other relevant meta data of music. It will also employ a conventional procedure for musicological research as follows:

- (1) To undertake archival research to find out whether songs of the community have been recorded in the past. These are prepared so that they can be taken back to the community.
- (2) To consult with community members to identify the songs to be performed, recorded and described.
- (3) To identify/train community members who wish to record (audio and video) performances.
- (4) To record performances/musical events and their preparation.
- (5) To play recordings back to appropriate community experts for explanation, transcription and translation, and also to record these events.
- (6) To transcribe the text and music, usually a standard musical notation system.
- (7) To identify structural units of performances and songs (verse, couplet, isorhythm, melody, dance), as well as poetic conventions (cf. section 3.1).
- (8) To distinguish features of the abstract musical structure from features of performance (dynamics, tempo, voicing, ornamentation). To identify the former by working on the song outside of its performance context (e.g. spoken forms) and by ensuring multiple performances of the one 'song'.

### 3.3. Anthropology of music

In order to look into the performers' recognition and understanding of music, this project employs an active participant observation: our team member, Y. Matsuhira, who is an anthropologist and musician, will learn the local music instrument from Kalahari Khoe players and participate in joint-performances and carry out participant observation as a player and interview joint-players, singers, and dancers in the course of training, preparation, and performance.

### 3.4. Digital recording, analysis, and archiving of speech and music data

For purposes of their preservation and analysis, substantial speech and music data will be recorded and archived as uncompressed digital sound files. We will also use software tools such as Praat for acoustic speech analysis and Transcribe!, ELAN and Audacity for music-linguistic archiving.

### 3.5. Digital photographing/filming for phonetic, gestural, and music analyses

Performance data will be recorded by still/movie cameras for the purposes of analysis and preservation. In addition, phonetic studies using digital images/movies including palatographic and other safe and uninvasive techniques which can reveal the articulatory features will be employed. Digital filming is essential for the scrutiny of speech/music performance including children's songs and nursery rhymes, in which paralinguistic features, such as gestures, postures, spatial distance among performers play important roles. Digital movie recording is also indispensable for analyzing the vocal and gestural activities observed in the interaction between caregivers and children, particularly for analyzing those with melodic and rhythmic ("song-like and dance-like") features.

### 4. Ethics guideline

We adhere to the highest ethical standards in our research. In particular, we will show respect for the individuals, communities, and cultures with which we work. We will obtain informed consent of the Kalahari Khoe community members who participate in the study. We will also obtain the participants' consent to disseminate the results of the research. In addition, explanations will be given to the participants of the uses to which the material will be put and how the material will be accessed. The research plan of the present project has been reviewed and approved by the Research Ethics Committee of Tokyo University of Foreign Studies.

### 5. Research team personnel and collaboration with University of Botswana

Our research team consists of experts in linguistics, anthropology, musicology, and other relevant cultural studies. Table 1 lists the project members from Japan and Australia.

Table 1. Project members from Japan and Australia

Name	Institution	Research domain
NAKAGAWA, Hiroshi	Tokyo University of Foreign Studies	Phonology, morphosyntacs, lexicography
ONO, Hitomi	Reitaku University	Morphosyntax, semantics
TAKADA, Akira	Kyoto University	Anthropology, ethnography
MARUYAMA, Junko	Tsuda University	Anthropology, ethnography
MATSUHIRA, Yuji	University of Hyogo	Anthropology of music
BARWICK, Linda	University of Sydney	Musicology, ethnomusicology
TURPIN, Myfany	University of Sydney	Ethnomusicology, linguistics

This project is part of our scientific collaboration with specialists in African languages and literature at the University of Botswana (UB). Table 2 summarizes the UB-based personnel that will be involved in the research project.

Table 2. UB-based project members

Name	Affiliation in UB	Function
GABANAMOTSE-MOGARA, Budzani	Professor, Head of the Department of African Languages and Literature, Faculty of Humanities	Joint-research coordination, research in descriptive linguistics and sociolinguistics of Kalahari Khoe
BATIBO, Herman	Professor, Department of African Languages and Literature	Research in descriptive linguistics and sociolinguistics of Kalahari Khoe languages
CHEBANNE, Andy	Professor, Dean of Faculty of Humanities	Research in descriptive linguistics and sociolinguistics of Kalahari Khoe languages
LETSHOLO- TAFILA, Rose	Professor, Department of English	Research in theoretical and descriptive linguistics of Kalahari Khoe languages
NHLEKISANA, Rosaleen O. B.	Professor, Department of African Languages and Literature	Research in the culture of the Kalahari Khoe, including cultural musicology, rites of passage, rituals and folklore
SELOMA, Pearl S.	Lecturer, Department of African Languages and Literature	Research in cultural issues and folklore of the Kalahari Khoe
JANIE, Benjamin L.	Lecturer, Department of African Languages and Literature	Research in oral traditions of the Kalahari Khoe, including oral poetry, performance, rituals and dance

Previous collaboration with the linguists at University of Botswana has been successful in producing original research outcomes in the last five years under the title “Linguistic documentation of selected Kalahari Khoe languages”. The project was conducted from 2013

to 2018. Among others, two latest works in 2018 should be mentioned here: First, at the 9th World Congress of African Linguistics, H. Nakagawa played a role of modulator, chairing Khoisan Session 1 (25 August 2018, Rabat, Morocco), where three papers were presented by members of the collaborative project, i.e. A. Chebanne's "The Pragmatics of Person, Gender and Number Subject Markers in Cua", H. Ono's "Focus marking and identification in G|ui", and H. Nakagawa's "Click acquisition in G|ui". Second, H. Nakagawa and A. Chebanne co-edited Anthony Traill's posthumous work, *A Trilingual !Xóõ Dictionary*. This dictionary is the extended revised version of the most detailed Khoisan lexicon containing not only detailed linguistic lexical but also substantial ethnographic information. These outcomes are some of our collaborative achievements. Our joint-project is mutually beneficial, and is therefore worth being sustained.

## 6. Research dissemination

When completed, this research will present findings that will facilitate a better understanding of some important aspects of the Botswana society that is contributed by Kalahari Khoe languages and culture. Building this knowledge base and involving local researchers will ensure ownership of research and its findings. It is also our fervent intention that Botswana and Batswana should benefit by understanding it is the cultural patrimony of the country.

Dissemination of outcomes of the project will include publications of findings deposited at the University of Botswana, the Botswana National Library and the Botswana National Archives. To ensure that the outcomes of the project go beyond academia, we will also give copies of our research reports and published materials to local organizations, e.g. Kuru, D'kar, and relevant community libraries.

## 7. Capacity building

The collaborative nature of this project will contribute to capacity building of the University of Botswana academics and the development of trans-disciplinary interest in research on Botswana. The University of Botswana highly encourages collaborative research, internationalization, multi-disciplinarity, and capacity building of young scholars and graduate students, etc. This project will therefore bring about the desired internationalization, interdisciplinarity, and capacity building of staff in field methodology and data analysis.

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#### Notes

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- 2) Field investigations were carried out in Botswana under the research permit YSC 1/18/1 III (40).
- 3) I thank Myfany Turpin for detailed suggestions on ethnomusicological fieldwork procedure useful for this section.