This paper describes a small scale collaborative effort between a linguist and a native speaker, who is also a language educator, to collect Blackfoot lullabies to use as language teaching and learning tools. We discuss the implications of using lullabies in language revitalization and describe our fieldwork of lullaby collection, data organization and the transcription of lyrics and melody.

A lullaby is a song usually sung by adults to infants to help them calm down, go to sleep or continue sleeping. We chose this genre for our project because it tends to include more identifiable words than other Blackfoot songs. There are more than thousand Blackfoot songs recorded from the late 1800s to the late 1900s (Nettl, 1989). However, most of them are sung with vocables and lack linguistically meaningful words.

Once songs with lyrics are collected, whether it is a lullaby or other types of songs, it is possible to find linguistically relevant phrases that may help acquiring sounds, words and phrases of the language. Within the songs we collected, such lyrics are found. The following examples (1-5) show some linguistically significant phrases included in the collection. The following abbreviations are used in the analysis line (3rd line of each example):

REF. reflexive
DIR. direct theme
DUR. durative
VT. verb is transitive
2sg. second person singular
3sg. third person singular
2sg.imp 2nd person singular imperative

(1) Intransitive sentence (sentence with one participant)
  \textit{aipottaaw}
  a+ipottaa+w
  DUR.+fly+3sg.
  “it is flying”

(2) Transitive sentence (sentence with two participants)
  \textit{kitsiksipawa}
  kit+siksp+a+wa
  2sg.+bite.VT.+DIR.+3sg.
  “you bite him/her”

(3) Question sentence
  \textit{ahsa kitáoowatoo ’pa}
  ahsa kit+a+oowatoo’p+wa
  what 2sg+DUR.+eat.VT.+3sg.
  “what are you eating?”

Indigenous Language Revitalization

(4) Imperative sentence (command)
poohsapomahkaat
poohsap+omahkaa+t
toward^speaker+run+2sg.IMP
“come and run over here”

(5) Reflexive sentence (himself/herself)
áwaapinioohsi
áwaapini+oohsi
DUR.+eye+REF.
“he is rubbing his eyes”

It is important to note that there are exciting possibilities in traditional songs. For example, they may contain an archaic form (Hinton, 1984). In general, members of the Blackfoot Confederacy are aware that modern Blackfoot is different from how it was spoken in the early 1900s. They refer to these two versions as Old Blackfoot and New Blackfoot (Kaneko, 1999). From our fieldwork, we found a phrase that is not used by current speakers, and this is shown in (6) below. This form uses an extensive incorporation, which means that one word consists of many meaningful parts.

(6) Extended Incorporation
itsiki'tapatsiistakssko aikkaayi
it+ikit+apát+iistákskoo áikkaayi5
there+across+behind+rocky^cliff DUR.+run^fast
“the one running fast around the rocky cliff”

Since the extended incorporation like the example above is no longer used by the modern Blackfoot speakers, finding an example gives us a feeling of bringing the past into the present. Songs with lyrics are precious as they contain linguistically important information.

The linguistic properties that can be found in songs are also used in regular speech. Native speakers acquire these properties naturally despite the grammatical complexity. However, it is a painstaking task for language learners who do not speak it natively, and one of the reasons is that it is harder to retain memorized information when the information is given in a second language.

However, one tends to successfully remember phrases when memorizes with a melody. According to Rainey and Larsen (2002), people who learned a new list of words sung with melody experienced greater ease in relearning them after a week than people who learned it without music. This suggests that songs can be used as a tool for word and phrase memorization. Also, we experienced an interesting example case with one of the interviewees from our fieldwork. He told us that he knew a Japanese song he learned when he was in Okinawa, Japan. He had not sung it for 64 years, but he successfully recalled the song and even performed for us. The first author is a native speaker of Japanese; she understood the lyrics, and she is aware that the song actually exists.6 This supports the as-
sertion that words and phrases associated with a melody can be remembered for long time even when the language is not one’s native language.

There is an advantage in cognitive development when using songs in language education. Left and right brains tend to process different types of abstract information. Generally for a right-handed individual processing linguistic information involves the left cerebral hemisphere (or left brain), which tends to be the processor of higher mental skills. The right cerebral hemisphere (or right brain) usually involves processing artistic and spatial organization. Singing then must involve activities in both brains because melodic information is usually processed in the right cerebral hemisphere and rhythmic information in the left; thus singing enhances cognitive activity. In a recent study, it has been found that music training enhances verbal skills (Musacchia et al., 2007). We strongly believe that the use of songs should enhance learners’ language skills as well as cognitive skills.

In addition, the use of songs brings the element of fun to language learning. Learning new phrases or grammatical information often tires out one’s brain and easily leads to boredom or discourage learners from further learning. However, songs let learners take a break from the boredom while still acquiring the linguistic information: lyrics. Effective results of the use of songs in language classes have been reported by teachers of various languages (Anton, 1990; Bruno, 1989; Goodluck et al., 2000; Jolly, 1975; Techmeier, 1969). Furthermore, songs do not require conversation partners. A song is a great tool to learn a language because one can practice singing by him/herself, and it can be used repetitively, which contains an aspect of drilling.

Some songs contain culturally and scientifically interesting information. The free translation of one of our collection is as follows:

*coyote, run over here!*
*this one does not want to sleep*
*you bite it!*

This song sounds threatening, but it is in fact humorous to Blackfoot speakers. Lullabies have function of reinforcing the social order between mothers and children (Howes, 1974). That is, we may be able to learn the how Blackfoot speakers discipline their children. As Ayoungman-Clifton (1995) describes in her paper, humor is an important factor for social function in the community.

We also found that these songs collected tell us about natural science in the area of the language spoken. All the songs we collected include an animal character. They are either a mouse, coyote, elk or crow. They tend to sing about their natural behaviors. For example, one of them sings about an elk eating swamp-grass. Thus we can study what elk eat, and the natural habitat including swamps and swamp-grass in the local area. It is exciting to find these kinds of topics in the lyrics because science is one of the typical subjects taught through immersion in primary grades (Reyhner, 2003).
The lullaby documentation project

In this section we describe our lullaby documentation project. We interviewed six elderly Blackfoot native speakers, between 68 and 82 years old. The recording sessions were conducted in the summer of 2007 on the Blackfeet Reservation in Montana. Prior to the recording sessions, we planned the general process of the fieldwork. Interviews took place at the Piegan Institute and a nursing home, both located in Browning, the main town of the Blackfeet Nation. The digital recorder we used is a Marantz MDP-660, which records sound in the wave format. The second author, who is a Blackfoot-English bilingual, interviewed native speakers in Blackfoot. She did not speak English except when she felt it appropriate, such as for the purpose of filling lexical gaps. The first author, who is a non-native speaker of Blackfoot, was present during the interview sessions, and she left the room when speakers seemed to be responding more in English than in Blackfoot. We recorded entire interview sessions.

Interview questions included whether they remembered any lullabies and/or children’s songs in general. If they answered that they remembered songs, we asked them to sing them. Two of the six interviewees remembered Blackfoot lullabies from their childhood, and we were able to record five lullabies.

From the recorded materials, the first author extracted only the song performances and saved each song as a sound file using Cool Edit Pro sound-editing software. These files were saved as mp3 files instead of the original wave format because mp3 requires less space on the hard drive. Then these sound files were stored on a Compact Disk (CD), which was sent to the second author by mail. We each listened to the songs several times individually to familiarize ourselves with these songs before our next meeting, which is described below.

Next, we met again in Browning to conduct a transcribing session. To our meeting, we invited an elderly native speaker who also participated in the recording and was the performer of two of the recorded songs. A song usually consists of two or three linguistic phrases. First we played one whole song through the computer speakers. Then we played only a part of the song (a few syllables or one phrase) multiple times in order to transcribe the lyrics correctly. When we thought we had the phrase correctly, we moved on to the next phrase.

In the course of transcribing the lyrics, we engaged in capturing all meaningful phrases or words. We gave free translations in English for our reference. We also tried not to skip any other sounds or syllables which are meaningless, such as vocables. We also noted how the phrases may be pronounced in regular speech since the sung versions may include sounds and syllables that do not usually occur in regular speech (c.f., Hinton, 1984, 1994; Fitzgerald, 1998).

Relying on the recorded song performance, we transcribed the lullabies’ melodies. We are aware that it would be possible to find variations of the melody if there were more native-speaking participants who remembered the same songs. We used the Western music notation method, which is widely used by both professional and amateur musicians.

Once the transcription was completed, we made an information sheet that includes (i) lyrics, (ii) music notation, (iii) linguistic information on the lyrics,
and (iv) the regular-speech version of the lyrics. The sample of a transcribed song is shown in Figure 1 below:

**Figure 1. Sample of transcribed song**

\[ \text{Ihtáópa'mohkio'p} \]

Blackfoot Lullabies

<table>
<thead>
<tr>
<th>Song 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>kanaskina ya ki awapiho</td>
</tr>
<tr>
<td>ku nitónni yo</td>
</tr>
<tr>
<td>ku nitónni yo</td>
</tr>
</tbody>
</table>

\[ \text{\small kà nas ki na ya kì waapi ho si kiu ni tón niyo kiu ni tón niyo (REPEAT)} \]

**Linguistic Note:** kanaskina ya ki ñ-waapiho chsí kiu nitónni yo kiu nitónni yo mouse voc. voc. dur. + eye + ref. con. once voc. voc. once voc.

**Regular Speech:** kanaskina ñwaapiho kiu nitónni, ni tónni.

"A mouse blinks, once, once."

The plan for the immediate future is to disseminate the CDs with the information sheet to the teachers of Cuts Wood School and other language educators on the Blackfeet Reservation, young parents of infants, college students from the tribe and other adult learners of Blackfeet. We targeted these groups because schools are effective places for the purpose of mass education. Many children will be able to listen to one song at the same time. Parents of infants are also crucial because learning any language is thought to be the instinct of babies (Pinker, 2000). The parents can play the music and learn the songs with their babies. College students of the tribal group are also targets for our project since many of them wish to learn their heritage language.

**Conclusion**

In this paper we described our collaborative effort to collect Blackfoot lullabies. As Grenoble (this volume) and Rice (this volume) note, there can be tensions between linguists and Indigenous communities based on the history of colonial exploitation of Indigenous peoples. However, both large and small scale collaborative efforts can be successful (see Peter et al., 2003; Kuhlmann, 1992; Yamada, 2007). We feel our collaborative team, a language community member and a non-native linguist, was successful despite fears some community members have that linguists might turn their speech into some illegible research papers that not directly help revitalize their language. On the other hand, linguists might hesitate fearing that the work might be less academic than the field requires. Thus the difficulties of conducting a collaborative work often are caused by the different goals that the team members have.

We strongly believe that building a trusting relationship is very important. We first identified what the primary goal of our project was. Depending on the
team, their project topic will be different, such as language-learning material creation, language documentation or writing a paper in linguistic analysis. We chose this “lullaby recording” as our primary goal envisioning the immediate use of the recorded materials in language learning, and the source can also be used for linguistic analysis as well.

We hope the songs we collected will be sung by teachers and students at the immersion school, young parents of newborns and anybody else wanting to sing these songs. We also hope these phrases in the lyrics will live inside and outside of the songs and be a part of revitalizing the Blackfoot language. We are convinced that songs are great tools for language teaching and learning.

Notes
1 We would like to thank the Piegan Institute and Darrell Kipp, the director of the Institute, and the interviewees of the recording project. We also thank Donald Frantz, Akira Yamamoto and Donna Mendelson for giving us feedback. All mistakes are ours. This project was partially supported by the University of Montana Small Grant and the Phillip Fund at the American Philosophical Society that was awarded to Mizuki Miyashita.

2 For our analysis, we used the *Blackfoot Dictionary* (Frantz & Russell, 1989) and the *Blackfoot Grammar* (Frantz, 1991), which are primarily based on the dialects spoken in Alberta, Canada. Although our interviewees were speakers of the Pikani dialect, in this paper, we used the forms found in the dictionary for the referential purposes.

3 The morpheme *kit-* indicates an involvement of second person regardless of the number being singular or plural (Frantz, 1966, 1991). However, we glossed it as second person singular for the purpose of simple presentation.

4 The actual sung form is a variation of the form given here: *itsiki’tapayiistákssooyikayai*

5 According to the *Blackfoot Dictionary* (Frantz & Russell, 1989) the form for “run fast” is *ikkaayi*. According to An English-Blackfoot Vocabulary by Uhlenbeck and Van Gulik (1930), which is based on the Pikani dialect, the form for the same word is *ikaiayi*, and this form seems to be closer to what we found in the song.

6 The song the interviewee remembered seems to be a version of a song called “Rabaura Kouta.” This song was one of the popular songs aired on the radio during WWII. Lyrics of this song were often rearranged by young generations for self-entertainment. The song we encountered here had the melody of “Rabaura Kouta,” but the lyrics were slightly different from the original. The writer of the original version is unknown.

7 Cuts Wood School is the Blackfeet Immersion School founded by the Piegan Institute (Kipp, 2000).

References
Blackfoot Lullabies and Language Revitalization

Indigenous Language Revitalization


Rainey, W.D., & J.D. Larsen. (2002). The effect of familiar melodies on initial
learning and long-term memory for unconnected text. *Music Perception*,
20(2) 173-186.

L. Carrasco & L. Lockard (eds.), *Nurturing Native languages*. Flagstaff,
nau.edu/~jar/NNL/

Journal*, 53(2), 96.

Based on material from the Southern Peigans*. Amsterdam, Netherlands: K.
Akademie van wetenschappen

Yamada, R. (2007). Collaborative linguistic fieldwork: Practical application of
the empowerment model. *Language Documentation and Conservation*,
1(2), 257-282.