

Language Documentation and Description

ISSN 1740-6234

This article appears in: Language Documentation and Description, vol 10: Special Issue on Humanities of the lesser-known: New directions in the description, documentation and typology of endangered languages and musics. Editors: Niclas Burenhult, Arthur Holmer, Anastasia Karlsson, Håkan Lundström & Jan-Olof Syantesson

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Cite this article: Siri G. Tuttle (2012). Language and music in the songs of Minto, Alaska. In Niclas Burenhult, Arthur Holmer, Anastasia Karlsson, Håkan Lundström & Jan-Olof Svantesson (eds) *Language Documentation and Description, vol 10: Special Issue on Humanities of the lesser-known: New directions in the description, documentation and typology of endangered languages and musics*. London: SOAS. pp. 82-112

Link to this article: http://www.elpublishing.org/PID/115

This electronic version first published: July 2014



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Language and music in the songs of Minto, Alaska

Siri G. Tuttle

1. Where is Minto?

The community of Minto lies about 130 miles northwest of Fairbanks, Alaska. This village is known as 'New Minto' because it was created, and moved to, in response to repeated flooding of the historical Tanana River site of the village (*Menhti*), now called 'Old Minto'. The indigenous name of the site of New Minto is *Menok'oget*, 'face gets chapped', for the sharp winds that blow on the bluff

Figure 1: The North Fork store at Menok'oget¹



¹ Photo by Elizabeth Leitzell

Siri G. Tuttle 2011. Language and music in the songs of Minto, Alaska. In Jan-Olof Svantesson, Niclas Burenhult, Arthur Holmer, Anastasia Karlsson and Håkan Lundström (eds.) *Language Documentation and Description*, Vol 10, 82-112. London: SOAS.

The people of Minto are Alaskan Athabascans. Their indigenous culture is characterized by a complex kinship system and seasonal subsistence activities including hunting of moose, caribou, small game and birds, salmon and whitefish fishing, and berry gathering. The people of Minto have been in contact with people of European heritage since the late 19th century, when steamboats began to work the Tanana, serving settlers and prospectors during the Alaska gold rush.

2. What the Minto language represents

The Athabascan language spoken in Minto is the last dialect surviving of the language known as Tanana or Lower Tanana. It is extremely endangered, with no native speakers under the age of 70, and fluent elders passing on. Never spoken by great numbers of people, *Menhti kenaga'*, or *Benhti kokht'ana kenaga'*, 'the Minto people's language' as the elders prefer to call it, is now spoken by fewer than ten people. During the time of this project, four elders passed on, all of whom had been active in language revitalization efforts at different times. The grief and frustration that this occasions is palpable in the Minto community, both in the village and outside it. We are working with the last group of elders with sufficient cultural and historical knowledge, and sufficient knowledge of the language, to decode some of the older archived songs. For some material, the time is already past.

The elder leaders in Minto decided that songs should be studied. Neal Charlie, traditional chief of the village and one of the most important contributors to the project, stated his reasons for this (in English, recorded in author's fieldnotes) at a 2005 workshop where researchers were urged to take up the task of music research:

I'm going to get back to some of our native ways. These are the things that used to be important. Let young people know about their grandfathers' songs. It's not our songs, it's way back. Little Peter died way before some of you was born, but we still remember the song that he made. The sad part of it is that we're forgetting a lot of it because we never use it, and we're forgetting it. Every day we're forgetting something of our native ways, because we don't use them no more. And that's too bad there. I think that our native ways, like our languages and our songs, I think is very important to our people, and should be very important to the young people right now.

The Lower Tanana Athabascan language, now spoken only in Minto, is moderately well documented. It is one of the eleven Athabascan languages

spoken in Alaska. The following summary of research is far from exhaustive; for further information about unpublished Tanana materials, consult the Alaska Native Language Center Archive website². Krauss (1964) published Minto data, and he later produced a noun dictionary (1974). The ANLC Archive also contains Krauss' manuscript text collection and field notes. Kari's lexicographic (1994), orthographic and ethnogeographical (1991) work has provided a strong basis for many cultural and linguistic inquiries. Tuttle (1998, 2003) addressed prosodic structure and the relationships among lexical tone, stress and intonation; Tuttle's 2009 Benhti Kokht'ana Kenaga' is a small dictionary featuring selected verb paradigms and examples of word usage. The language is verb-final and polysynthetic. The Tanana language is relatively conservative prosodically, in that its verb prefix phonology is more transparent than that of other Athabascan languages, although it does have lexical low tone from historical yowel constriction.

Several generations of Minto elders have participated in sharing their culture with formal researchers in many disciplines. They have also supported religious and secular community organizers, language learners, and interested visitors. The intensity and variety of study of Minto language and culture is partly due to Minto's relative geographic proximity to the academic community at the University of Alaska Fairbanks and the multi-cultural community of Fairbanks itself. This means that information about their heritage and their lives is present in many other places other than the abbreviated record of linguistic research included above. Only strictly linguistic and musicological references are included in this paper, but the reader is encouraged to look further into the extraordinary contribution of Minto Athabascans to the cultural and moral life of interior Alaska.

3. Minto Songs project

3.1. Inception

The project reported on here (NEH HD-50298-08, *Minto songs*) set out to integrate archived Minto music present in the ANLC Archive and other archives with information from elders and other sources. While there was some musical recordings that had been labelled as music archived at the University of Alaska Fairbanks (including the very excellent collection of Nenana dance songs submitted by Pearce with his 1985 master's thesis) many

² http://www.uaf.edu/anla/

of the existing song recordings lay embedded in longer recordings consisting of story-telling or grammatical elicitation. Most ANLC recordings at the time were labelled at the level of the audiotape or CD object, without internal annotation (additional digitization and cataloguing for different languages has proceeded since this project was begun³. There was also a fairly large collection of Minto music and speech recordings in a distant place: materials recorded by Anna Birgitta Rooth during her trips to Alaska had been archived in Sweden. This archival material was made accessible through the contribution of Håkan Lundström of Lund University, who had served as student assistant to Rooth during her years of research and who undertook to digitize and repatriate the materials from Minto.

3.2. Methodology

The activities in this project included archival organization, workshops, linguistic/musical sessions and transcription. A student technician spent the period of the project listening to 44 Minto recordings in the Alaska Native Language Center in real time, defining points of transition within them, and marking the presence of music. These recordings were presented to the elders and discussed with them, at workshops in Minto and Fairbanks and in smaller sessions, mainly held at the researcher's or elders' houses in Fairbanks. Follow up sessions have continued to be held at the participants' convenience, during which elders may volunteer more songs, work with the researcher on previously transcribed and translated lyrics, and answer other questions that have arisen through song study.

3.3. Ethnographic observations

In sessions with elders and in interaction with community members during activities related to this project, a number of observations were made that were not linguistic or strictly musicological in nature. The best label for these observations is probably 'ethnography'. These observations informed session work and are very important to the archiving of Minto's musical materials.

Songs introduced to the researchers by elders vary in their attribution. Composers are not credited for the oldest songs (but see 'Caribou Song', section 6.3), which have been used in ceremonial and narrative contexts, probably for millennia. Some other songs are simply described as 'very old', and elders state that they do not know who composed them, but the context

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³ See http://www.uaf.edu/anla/

makes clear that there were composers. For many songs written since 1900, however, both composers and contexts are known. These include memorial potlatch songs, the particular focus of the elders' interest, but other songs are also known as composed, including dance songs and personal, or art songs.

The original impetus for this project, as described by elders in discussion of project plans, was this: elders are very aware of the difficulty young people experience in trying to learn their grandparents' language. Because the language is not used much in conversation, and English dominates the overall linguistic landscape for young people, this difficulty may feel insurmountable. It is the elders' opinion that learning songs, which is also fun and builds community spirit, can give learners a head start on using language. When people sing together, the little mistakes made by individuals are lost in the overall effect, and learners can gain confidence. Thus, research on songs was requested in order to make as much information as possible available to learners

Minto singers perform songs in many contexts, some public and others more private or formal. Most song types can be performed publicly even in situations that mingle non-Athabascans with Athabascans, such as arts festivals or public occasions like the annual conference of the Alaska Federation of Natives. The major exception to this is the memorial potlatch song, which is intended to be sung only once by the person who prepared it for a loved one.

This memorial song tradition is complicated slightly by another practice, that of singing very beautiful older memorial songs at funerals. These songs were made for particular people by particular people, but they are retained and used in the funeral setting, when the deceased has just passed on and there has not yet been time to create a new song for them. These songs are perhaps on their way to becoming generic 'mother', 'father', or 'grandfather' songs, but in this project only one or two had been separated from the information about their composition and context, and others were still clearly identified with their origin.

Language learners trying to learn Tanana dance songs have a difficult challenge. There are important words in these songs, though usually not a great many, but they are not always pronounced the same in songs as they would be in speech, and when songs are sung during dancing, the lyrics may be largely unintelligible. The student picks up what he or she can, but the value of such practice to language learning may be more social than strictly linguistic. There are not enough words, and there is not enough grammar, in dance songs to increase a learner's language knowledge very much. However, the confidence inspired by group singing may be underrated in its effect on language learners' progress. The opportunity to sing Minto words in a group setting, where others' pronunciations can drown out one's mistakes or

disfluencies, is a valuable one. Furthermore, the regular practice of dance and song in school and community groups supports village identity and group solidarity.

In contrast, preparation for a memorial potlatch includes song practice that allows the learning of complex lyrics containing poetic language. As the Minto elders note, 'there's advice in there – people need advice, young people really need advice, and some words in there are really good' (Geraldine Charlie: Tuttle notes 2005). The words to memorial songs recognize the virtues of the person memorialized, in accordance with the kin term by which they are called: father, mother, grandfather, older sister. By learning how admirable people are described, a young person can form ideas about how life should be lived in one's role as that member of a family.

Song practice involves visiting one another's houses and singing together the songs that will be used for an occasion. It would not be appropriate for dance songs, because there is really no room for dancing in a kitchen, but it is just right for lyric learning and careful listening. If a person has written a new song for an occasion, the song might be tried out on singing elders in this context. If correction were needed to lyrics or tune, that could be accomplished in this smaller social setting.

4. The humanities of the extremely endangered

4.1. 'There are only four of us'

It would be very difficult to exaggerate the endangerment of the Minto language, and in particular of the singing and song-writing traditions treated in the present paper. The singing elders are self-selected and self-enumerated, but nobody quarrels with their estimate: at the time this paper was begun, there were four of them. In November of 2010 the number was reduced to three, with the passing of the late Neal Charlie, the strongest composer of the group.

It has been their choice to bring songs and music forward on every possible occasion. Much was collected as a byproduct of discussions and elicitation sessions involved with the *Benhti Kokht'ana Kenaga'* dictionary project. When funding was granted by the National Endowment for the Humanities, there was already a fairly large set of recordings to work with.

Figure 2: Bergman Silas, Sarah Silas, Geraldine Charlie and Neal Charlie, August, 2010[†]



This project has followed the desires of the singing elders from the beginning, attempting to remain as fluid as possible in order to capture the fleeting opportunity to document information. In bowing to the choices of the 'subjects' of the research (a word that makes little sense in this project) the researcher let go of control in the documentation phase. Because time itself places constraints on this kind of learning, openness to a wide spectrum of documentation is required; collection precedes analysis. As a consequence, understanding arrives in retrospect, and the questions are asked after the answers are given. This is commonplace in archival study, but not so common when consultants and teachers are present and can sometimes be questioned.

Learned and generous elders are sometimes referred to as treasures, or otherwise treated as if they themselves were equivalent to their knowledge. Their loss, however, exceeds the measure of the academic value of their knowledge, because they are first and foremost supports to their community. Young people have grown up knowing them as elders, feeling as if they would always be there. With the steadfastness that characterizes true public servants, these elders try to be there as well and as long as they can. When they have to depart, their absence is felt in the hearts of those who know them before it can be quantified in the megabytes of sound recording or the lines of text.

⁴ Photo by the author

4.2. Researchers and sustainability

In the best of situations and with the best of intentions, a linguistic visitor can easily end up in situations where he or she is functioning as an artificial link in the chain of cultural transmission. To refuse to help would be a violation of the reciprocity that underlies so many of our agreements between the researcher and the researched. To accept the role is to feel deeply one's inadequacy to the task. Those who can remain in the business learn to keep an eye on long-term goals, hoping for the approbation of generations not yet able to ask for the documentation we are creating.

If we think of a visiting documenter as a transmitter of some sort, different possibilities exist for the source and the target of the transmissions. Perhaps the bright light of endangered culture is transmitted in one direction only, through the visitor and out to the academy and some part of the outside world. Perhaps some piece of the transmission is preserved, in an archive or by publishing, or by hiding data beneath the floorboards of a kitchen, as has been rumoured of John Peabody Harrington. This one-way transmission would not have seemed out of place a century ago. It would be criticized today.

One-way transmission is never really possible, of course. Visitors may stay a very short time, but what they say is noted. What they say is taken to be important, sometimes to be reliable – perhaps in inverse proportion to the length of their stay, since important people often make short visits, and importance could correlate with reliability. To work on language documentation in an endangered language situation is to embody the observer's paradox: everything you do is magnified in its potential effect, relative to the amount of language being spoken in the community. This is especially true of the researcher's attitudes towards the value of living (and changing) language and tradition.

The relationship of the researcher to community learners – those in the community who are trying to gain proficiency in their ancestral language before it disappears – is especially tricky. The researcher knows how to study and has done homework before visiting, so he or she sounds better on the first exchange of language than a beginning learner. The researcher has professional or 'pro-sumer' equipment and maybe some professional vocabulary is used, which could be disheartening and intimidating to local learners. The learner, who is the real fulcrum of language retention or revitalization, can be awed, annoyed, and silenced by too much researcher flash. Worst of all, sometimes fluent elders may use researchers to shame learners: 'oh, you got it right away! I wish my kids could do that. They don't even try. Nobody wants to learn.' Avoiding these dangers involves careful self-presentation and real humility, because that is one quality that is very difficult to counterfeit successfully.

To questions of sustainability in such a highly endangered setting, we have to ask at the deepest level what we desire to sustain. We cannot expect the research setting to remain unchanged. We cannot expect to be able to ask yesterday's questions tomorrow. If we are lucky, we can hope to help sustain an environment where minority language and linguistic art are valued as they change. And if such an environment continues to exist, perhaps due partly to our efforts, we can hope that we will continue to be allowed to visit.

5. Previous research on Athabascan songs and singing

5.1. Dance songs (Pearce, Lundström, Johnston)

Previous discussions of Minto song and dance have focused on music and movement, without much attention to the structure of song lyrics. Various song types are attested in different sources, differentiated mainly by function.

Lundström (1980) identifies *magic songs*, to include healing songs, hunting songs and songs to improve general conditions; *animal story songs* which appear within stories; *potlatch songs* to honor the deceased, *mourning songs* to express sorrow, and *dance songs*.

Pearce (1985) identifies *animal songs* as those made by animals and learned through dreams. These songs are very, very old: Pearce cites moose, bear, caribou and rabbit as having passed songs on this way. Other categories include a *dance for a gift* song, *ice cream songs* (used when making *nonathdlodi*, or 'Indian ice cream', *New Year's Day songs*, and the following *Party song* types: *Potlatch songs*, songs sung at a potlatch accompanied by the waving of hands, and *Dance songs*. Pearce's thesis focuses on dance songs.

Johnston (1992) sorts the potlatch song categories as follows: *potlatch songs, sorry songs,* and *dance songs*. In this article he does not pursue other categories of song. Johnston et al. (1978) present a number of Koyukon memorial songs in detail, with full melodic transcription and commentary on the context of composition.

The preceding listings may seem somewhat contradictory, but they are not, although there has been a slight proliferation of labels. There are simply quite a few categories of song employed by Minto songmakers and community members.

In our work, elders try their best to positively identify the function of songs we talked about, along with the date of composition, the occasion of composition, and the translation of lyrics. For some of the old songs, the words were well understood; for some they were very difficult to approach. Some examples will be discussed below.

5.2. Comparison (Lundström, McAllester)

The musical styles of dance songs are well described in Pearce (1985), which contains many examples with musical transcription, though none with aligned lyrics. Lundström (1980) exemplifies all the song types he discusses, with musical notation and aligned phonetic notation of lyrics. Johnston's (1992) article, which approaches musical styles of several Alaskan Athabascan groups, does not include musical notation, but discusses details of musical structure for each type, and includes translations of lyrics and discussion of their content.

In terms of musical structure, performance details and the structure of lyric content, Pearce and Johnston focus on potlatch songs and dance songs. Lundström (1980), which like Johnston (1992) deals with music from a number of Alaskan Athabascan groups and a variety of song types. summarizes musical structure and places it within the context of other North American indigenous music. He finds that the Dena'ina, Minto and Tanacross songs studied in his sample show important similarities to Southern Athabascan material (Apache and Navajo): 'steady drumbeat without syncopation and dotted rhythms, dominance of two durational values in most of the songs, relatively rare syncopations and dotted rhythms in the melodic line...[and] lack of tempo changes' (Lundström 1980: 160). He also finds some similarities in song form. Generally, the conclusion is that Alaskan Athabascan music resembles Southern Athabascan music more than it does the music of the Alaskan coast, that is, Yup'ik or Inupiag music. This is consistent with the comparative linguistic evidence that reconstructs proto-Athabascan, the mother language of the family, as having been spoken in the north less than three thousand years ago (Krauss 1973: 953). However, Lundström also notes similarities to music of the Northwest coast, south of Alaska, and points to a predominance of narrower intervals than in Apachean music. Lundström also points, in particular, to a falling contour in Alaskan Athabascan songs, particularly dance songs (1980: 155). He notes a tendency for repeated tones at the end of lines or sections.

Johnston and Lundström agree in designating the predominant scale in Alaskan Athabascan songs as pentatonic, with many narrow intervals, predominantly falling. Pearce's study of Minto and Nenana dance songs finds that these songs are equally likely to use a six-note scale as a five-note scale. Pearce (1985: 174) notes a particular 'ending' pattern for the dance songs, which includes several structural properties (three measures with particular rhythmic patterns, a falling melodic contour culminating in a flat contour, and relatively low final pitch) and several performance properties (glottalization, increased speed, increased volume, increased accentuation, and transposition up an octave for some singers).

All three of these researchers are ethnomusicologists, and where they discuss the lyrics to songs, they are interested in content, which has usually been translated as a sentence unit by a bilingual consultant or by a linguist. The structure of lyric language is not approached.

5.3. The relevance of McAllester's Navajo musicology

The Athabascan language family, which includes languages spoken in Alaska and Canada, on the west coast of Oregon and Northern California, and in the Southwest (Arizona and New Mexico), is a group of very closely related languages. It is estimated (Krauss 1973: 953) that Proto-Athabascan, the mother language spoken before the geographic groups diverged, was spoken only 2500 years ago. Despite salient differences in linguistic prosody between languages, and obvious cultural adaptations to the new territories inhabited following migration from the North, Athabascans share cultural trends as well as linguistic structures. For this reason, it does make sense to consider the detailed work of McAllester on Navajo music and song lyrics, to see whether some of the structures and behaviors he observed could be found in Alaskan Athabascan music as well.

McAllester noted several properties of Navajo song structure and performance that are related to findings in the Minto songs. In their 1981 overview of the topic, McAllester & Mitchell (1981: 606) note that Navajo women sing in a mid-range, while men often match them in pitch, singing in a high-tenor range. In Minto performances, high-tenor and matching alto lines are also common. The duple rhythm observed for Navajo song is also found in the Minto songs, as is the usual low ratio of meaningful text to non-meaningful vocables in most lyrics. (In the Minto materials, the exception to this is the memorial potlatch song; McAllester states that Navajo ceremonial songs also contain many lines of poetry.) McAllester & Mitchell (1981) and Lundström (1980: 160–161) both note similarities between the scales used in Navajo music and Tanana music, and observe that the scale in question is unusual in other Native North American music.

Navajo participants at the Navajo Language Academy in July 2010 (held at the University of New Mexico in Albuquerque) noticed another similarity between Minto and Navajo music; in a memorial potlatch song shared with them, glottal pulses occur rhythmically, approximately on quarter-note sized beats. This author speculated that this glottalization, which has been described as producing a sobbing effect, seems to keep the beat in the absence of a drum. Drums are not used for such songs. Navajo listeners reported that glottalization is also present in their ceremonial songs, and that drumming is not used for these

In his discussion of the First Snake song (1980: 17) McAllester observes that vowel length and lexical tone, which are distinctive in Navajo, are not respected in the lyrics of this song - every meaningful word is altered. In addition, syllable counts in the Navajo words in these lyrics were sometimes adjusted to fit song rhythms. McAllester (1954) includes a number of examples of similar adjustments to linguistic rhythm and lexical melody in the Enemy Way cycle. At the inception of our work with the Minto songs, it was not clear how lexical low tone would be treated in different song genres, nor whether rhythmic quantity would be respected. Since the song types differ considerably in the amount of language they contain, Minto songs might differ by function in how they relate to the prosodic treatment of words in lyrics. Some of the resulting findings may be a little surprising given McAllester's observations of Navajo, but it is possible that the genre and function of songs he analyzed in this way makes direct comparison of lyrical adjustment impractical between the languages, at least at this point in our research.

To summarize: McAllester's observations of Navajo music suggest a structural relationship between this music and that performed historically on the Tanana River. Since some of the features noted are unusual in Native North American music generally (McAllester & Mitchell 1981) it is likely that some may represent properties of a shared Athabascan musical heritage. The relationship between music and lyrics remains to be investigated in Tanana and compared with that seen in Navajo songs.

6. Examples and analysis

In this section, examples of a number of Minto song types are presented, including both pre-contact and post-contact material. Lyrics will be considered from semantic and phonological points of view in relation to the melody and rhythm of each song. Examples are given in the Minto practical orthography, as employed in Tuttle (2009).

6.1. Dance song 'Ganhok'

Sound file: ST1.way

In this dance song, the loanword *Ganhok* is introduced. This word is of uncertain origin, but may have been introduced (along with the item it names) through Tlingit contact. The Ganhok is a staff that is still used by dance

leaders to control the flow of a group in dancing. The meaningful lyrics are given in $(1)^5$.

(1) Joni lo'o Ganhok tolał here FOC Ganhok 3sS.be.FUT 'Here, this will be the Ganhok'.

In the performance of this song linked to the paper, four elders sing together, sometimes in unison, sometimes separated by an octave. Following two repetitions of the meaningful lyrics, the rest of the brief tune is filled in with set vocables. This is typical of dance songs, which introduce the important words at the beginning of a sequence and add meaningless (but designated, set) singing words, or vocables, as the tune continues. Lundström (p.c.) has noted that these tunes tend to start high (where the words are) and decline over a sequence.

This song is said to have been brought, with the staff itself, to a potlatch, and to represent the introduction of the staff to the Tanana people. It is not, to our knowledge, attributed to a particular composer.

In the lyrics of this song, there are no low or high-rising tonal syllables. All the syllables except for *-ni* in *joni* are prominent, either for morphological or phonological reasons. Given this fact and the duple rhythm of the song, and the fact that beats and syllables are synchronized, there is no matching of word stress with song rhythm. It is true that all downbeats fall on stressed syllables, but so do most of the upbeats. So far, in this project, it appears that most dance songs follow a similar pattern, with rhythm taking precedence over linguistic stress. This song does not provide evidence for treatment of lexical tone.

6.2. Medicine/story song Yozronh, 'Clear Sky'

Sound file: Neal Charlie, 2009: ST2.wav

This medicine or magic song, which was recorded by Rooth in 1966, was transcribed and described by Lundström (1980). Rooth recorded it as part of a story narration by Moses Charlie. The context is a situation in a story where a

⁵ The abbreviations used in this paper are: 1p, 2p, 3p = first, second, third person plural; 1s, 2s, 3s = first, second, third person singular; FOC = focus; FUT = future; h = human; IMP = imperfective; IND = indefinite; ; NEG = negative; O = object PERF = perfective; ; POSS = possessive; S = subject; STAT = stative; VOC = vocative; # =

disjunct boundary.

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certain character can make it rain for a long time. The rain-empowered character wants his axe back, which is his motive for making the others suffer. At a workshop in Minto in 2009, Neal Charlie explained the words to the song and re-sang it. His tune is slightly different from that sung by Moses Charlie in 1966. Mr. Charlie also explained that the action of calling for clear sky can be carried out just by saying *yozronh* 'clear sky', or sometimes by whistling.

The lyrics to Neal's version are given in (2):

Sech'etthala' (2) selotl'ogh Se+ch'e+tthał+a' se+lo+tl'ogh 1POSS+IND-POSS+chop+POSS 1POSS+hand+palm no'i'ovh no#i'oyh back#2sG+solid-round-object-IMP 'Give me my axe back'. yozronh eva yozronh eva vo+zronh vo+zronh VOC sky-clear sky-clear VOC 'Eva, clear sky'

In this song lyric, the word for 'axe' is unusual – the modern version of this possessed form would be as given in (3) (Kari 1994, Charlie, p.c.):

In both cases, the noun is double-possessed. Along with the first person singular possessor *se*- the indefinite possessor *ch'e*- is used. This construction is found in cases where a nominal is inalienably possessed (e.g., a body part) but can be 'repossessed'. 'My head' can mean only the head on my own body, but 'my something's head' means 'the animal head that I have', destined for the soup pot. This same construction is often found in Minto, as it is in neighbouring Koyukon, used with items that are not native to traditional Athabascan life (like teapots or trucks). Since the axe and the axeman seem to be supernatural in the story, perhaps the use of the indefinite reflects distance or respect for this object. The form in the song removes the syllable *ttha*, which means 'stone'. The resulting word means something more like 'my chopper' than 'my axe', but was still translated as 'axe'. The 'solid round

object' gloss for the verb indicates that this is not a modern axe with a long handle, but a chopper with a compact shape. Such axes were made of stone (tthatthil) or bone (tthenh tthil).

The word *yozronh* is unusual as well. *Yo* means 'sky', and is a common word in modern Minto. The compound with *zronh* has not been noted in lexical collection to date. This syllable form, however, is found in another compound, *nakhzronh*, 'eyeball', where it seems related to *sro* 'sun' (Kari 1994). If the usage were the same here, we would have a round sky, or maybe a sunny sky. However, a cognate compound, with the meaning as translated for Minto, exists in Ahtna (Kari 1990) *yazaan* 'clear sky', where the stem *-zaan* means 'clear'. It seems more likely that *-zronh* 'clear' in Minto was a productive stem at one time, and is retained in this folk fragment.

This song, like the preceding dance song, has a duple rhythm. This rhythm matches the rhythm of the words a bit better than the dance song does, however.

The following rather awkward tables attempt to express some of the relationships between the timing of syllables and the rhythm and melody of the music.

In these tables, pitch movements are stated in terms of relationships to adjacent tones. 'High' and 'low' are used only to give an approximation of where a tune may start. Once it begins, other pitch notations are in relation to what they follow. 'Flat' thus indicates that a previous pitch is continued; 'higher' that pitch moves upward; 'lower' that it moves downward (lower than the preceding syllable). Where pitch moves within a syllable, 'rising' and 'falling' are entered. In tables with many columns, these categories may be abbreviated to save space.

Rhythmic notations include D/U for Downbeat/Upbeat, and (X) and (.) for presence and absence of linguistic stress. Assignment of stress follows the quantity-sensitive moraic trochee system presented in Tuttle (1998); all stems are stressed by morphological prominence. 'Beats' refers to the number of beats that a syllable occupies. In the songs analyzed here, no syllable occupies less than half a beat (about an eighth note).

In the 'segmental' row, words and vocables are divided into syllables, rather than by word or morpheme boundaries. 'Gloss' provides a (roughly) morpheme-by-morpheme gloss, rather than an idiomatic phrase-by-phrase translation

In some tables, lexical tone is included as a separate row; this refers to both low tone from historic vowel constriction, and to high-rising tone present on the negative suffix and a few other words in the language. Most syllables do not have a tonal specification.

Pitch movement	high	lower	flat	flat	flat	flat	flat
D/U	D	U	D	U	D	U	DU
Beats	1	1	1	1	1	1	2
Linguistic stress	X	•	X		X		X
Segmental	se	ch'e	tthi	la'	se	lo	tl'ogh
Gloss	my	its	chop	poss	my	hand	to

Table 1: Yozronh, line 1

Table 2: Yozronh, lines 2-3

Pitch movement	higher	lower	flat	flat	flat	flat	lower	higher	flat
D/U	D	U	DU	D	UDU	DU	DU	D	UDU
Beats	1	1	2	1	2-3	2	2	1	2-3
Linguistic stress	X	X	X	X	X	X	X	X	X
Segmental	no	'n	'oyh	yo	zronh	e	ya	yo	zronh
Gloss	back	you	give	sky	clear	voc	voc	sky	clear

What we see in Tables 1 and 2 is that this tune and rhythm reflect the spoken version of the words somewhat more closely than the short lyric of the dance song given above. However, it is still the case that the music is overruling linguistic rhythm, in particular by assigning metrically strong syllables to upbeats.

A distinction does appear here, however, between prominence based on metrical strength (the identity of the full vowels *a, i, o,* as opposed to weak *e, w*) and prominence related to morphological distinctions, i.e., the identity of verb stems. Note that the stems *-tl'ogh, -'oyh* and *-zronh* actually do fall on downbeats and are held for more than one beat; *-tthi(l)* falls on a downbeat. This will turn out to be a pattern in a number of the songs we examine here, though it is not clearly evident in the dance song repertoire. It suggests that there is a difference between these two types of prominence in the minds of speakers, since setting lyrics to music uses first those aspects of the language that are salient in the writers' minds.

6.3. Medicine/teaching song 'Caribou'

Sound file: ST3.way

The Caribou Song was discussed during a small group session at the researcher's home in Fairbanks. The stimulus was a recording made by the well-known Minto elder Peter John, and archived in the Alaska Native Language Archive (TN27, ANLC2549). Neal was reluctant to discuss many of the songs recorded and commented on by Mr. John on this older recording. However, he did want to comment on one in particular, a Caribou song. The following quotations are from Neal Charlie's commentary on this recording, recorded in author's notes in January of 2008:

There was people that we used to call medicine people ... no doctor, no nothing them days, so they had to use them. And they used to believe that they had that people. But then, I don't know, the Devil took over, I guess, and they started to do bad things, so they had to get rid of them. So we don't use that no more, us.

The importance of the Caribou song, in particular, is that it is part of a Caribou story that teaches about the importance of honesty. The story, as summarized in English by Neal Charlie, goes like this:

They sent a young man up, they sent a young man up. It was snow, too much snow. Couldn't break trail no more, so they send that young man up, to see if there's any [caribou] track up ahead. He went up there and he come back and he say, 'I don't see no track, not one track.'

That night, medicine man wake up with this song:

'And what did you say to me?

There were none, you told me;

There were none, you told me.'

They say he call that boy over, that boy they sent up. He start to sing that song for him, and he tell him that 'You lied to us.'

And that boy, he change his story, he say, 'Didn't I tell you I see one track up there?'

The medicine man in the story wakes up with the song because the caribou themselves are teaching it to him, in his sleep. The song and the story are probably very, very old.

The lyrics to this song are brief, like those in both songs discussed to this point, but they are treated more like language than in either of those cases. In particular, in the Caribou lyrics, a lexical tone is incorporated into the tune. The breakdown of beats and pitches is given in Table 3.

Table 3: Caribou song, line 1: Do seldini chu

Pitch movement	low	higher	flat	flat	flat
D/U	D	U	D	U	DUDU
Beats	1	1	1	1	4 (about)
Linguistic stress	X	X	X	X	X
Segmental	do	seł	di	ni	chu
Gloss	what	to-me	you	say	and
Lexical tone	none	low	none	none	none

Table 4: Caribou song, line 2: Bekwlá, sełdini chu

Pitch	higher	flat	very high	lower	flat	flat	lower
movement							
D/U	D	U	D	U	D	U	DU
Beats	1	1	1	1	1	1	2
							(about)
Linguistic	X		X	X	X	X	X
stress							
Segmental	be	kw	lá	seł	di	ni	chu
Gloss	3s	none	NEG	to-me	you	say	and
Lexical	none	none	high-	low	none	none	none
tone			rising				

Pitch	lower	higher	flat	lower	higher	flat	low
movement							
D/U	D	U	D	U	D	U	DU
Beats	1	1	1	1	1	1	2
							(about)
Linguistic	X		X	X	X	X	X
stress							
Segmental	be	kw	lá	seł	di	ni	chu
Gloss	3s	none	NEG	to-me	you	say	and
Lexical	none	none	high-	low	none	none	none
tone			rising				

Table 5: Caribou song, line 3: Bekwlá, sełdini chu

The marriage of the high-rising negative morpheme tone to the high point in the melody, in the first repetition of the statement of the lie (Table 4), but not in the second repetition (Table 5), is a direct reference to linguistic prosody, and adds a distinct note of plaintiveness to the tune. This is a case where a Minto song does not match McAllester's observations of Navajo tunes. And yet it is clear that the music is not blindly matching an intonational pattern; in the second statement of the young man's lie, the negative morpheme is not given its lexical pitch, but is sung on the same pitch as the syllable before it. The use of the lexical tone in the melody seems to be an artistic choice.

It is harder to draw a conclusion about the matching of the low-toned syllable *sel*-, 'to me', because in the first line, this syllable is sung higher than the preceding toneless one (*do*- 'what'), but in the second and third lines, it is sung lower than the preceding syllable. The syllable that precedes it in lines 2 and 3 is, of course, the high-rising negative marker, so the contrast cannot be convincingly traced to the low tone; it could be accounted for by the high tone. As will be seen in the following analyses, an understanding of the treatment of low tone in melodies may require the analysis of a good deal more data.

6.4. Potlatch song 'Dolo K'adi'

Sound file: ST4.way

This song was chosen by elders as one of the first priorities in their songteaching project. As such, it was introduced in the first workshop where we recorded songs. A long session dealing with it produced a clear recording and a discussion of lyrics that yielded a basic translation. Since this type of song involves much more language than those previously discussed in this paper, this discussion was very valuable. It also included some instruction by the elders on song composition and song learning. The following dialogue comes from a workshop session in January of 2009. Present are Neal Charlie (NC), Sarah Silas (SS), and Geraldine Charlie (GC).

NC: We gotta, I think we gotta explain a little more what's going on here.

SS: *Khuzrunhts'e ch'udhetltth'oná*, ['I don't hear well'] I don't hear all the words.

NC: Sih chu, khuzrunhts'e ch'udhetltth'oná. ['Me too, I don't hear well'] Make it pretty bum ... Dolo is a native name, and this song was made after her by Little Peter, a fellow by the name of Little Peter.

ST: He wrote a lot of songs, didn't he?

SS: Do you know when the song was made?

NC: Somewhere around, after the flu [1918 flu, which hit Alaska in the early 1920s]. Dolo was one of the oldest people in Minto. She was the firstborn in that Chief Charlie's family, and that was an awful big family, there. And that was Moses Charlie's mother. Little Peter, the guy that made that song, that talk about *Soda*, that means 'my older sister'. And in between there he say En'a, because she was the oldest in that whole family: En'a!

GC: En'a means 'mother'. She's just like the mother of the family.

NC: And I tell you the truth, that every song, they used to teach young people where the song is coming from. They had to explain who it's after, and who made it, and parts of the meaning of it, what the song words in there, the meaning of it. That's why they used it as teaching. And the reason we'd like to get it back is because I believe that it'll teach our grandchildren. If they could learn our language back, I'm sure that a lot of them will learn out of these songs. That's what we're after, uh-huh'.

The structure of a memorial potlatch song, of which this is an almost canonical example, is the following: after an opening section in which an appropriate kin term is sung, verses follow that detail the virtues of the person who has passed on. The opening section and verse structure are repeated, often three times, two in this case. The musical treatment of the kin term that heads the song, and the recital of praise in the verses, differ from each other. In (4) the lyrics of this song are presented with basic translation.

'You are handy, they say'

Line 9

(4) oh-oh-oh-oh en'a'ey ohVOCABLE mother VOCABLE Line 1 soda oh-oh-oh en 'a 'ev mother 1s-POSS+older-sister VOCABLE Line 2 'Mother, mother, my older sister' ekhwdon'a ch'ukat dinot next-upriver while INDO+3+buy Line 3 'Just upriver, while out shopping' dit'a logha khełdi handv 2sS+be+STAT 3hS+with+speak-IMP Line 4 'You are handy, they say' nelo' dodelu' speaking-3sS-be-charming-IMP 2s-POSs-hand Line 5 'Your hands are worthy of praise'. ve'ał khenino doch'edenaghilovh vino 3+with 3hS+come-PERF speaking-INDO+2sS+gather-IMP while Line 6 'And they came, while you gather things together' en'a soda 1sposs+older-sister mother 'Mother, my older sister' Line 7 ekhwdon'a ch'ukat dinot next-upriver INDO+3+buy while 'Just upriver, while out shopping' Line 8 logha dit'a khełdi handy 2sS+be+STAT 3hS+with+speak-IMP

Line 10 'As she told him/her, they say'

Line 11 'And they came to it, while you put it up [food]'

Line 12 'Mother, my older sister'

In the following Tables 6–15, these lines are associated with pitch movements, down and up-beats, linguistic stress, lexical tones and meaning. A 'Morphology' row is added to these tables to keep track of categories of prominence.

Table 6: Dolo K'adi, line 1: Oh oh oh, en'a-ey oh

Pitch	mid	flat	lower	flat	flat	higher	lower	fall
movement								
D/U	D	UD	U	D	U	U	D	U
Beats	1/2	1	1/2	1	1/2	1/2	1	1
Linguistic	0	0	0	0	X	•	0	0
stress								
Segmental	oh	oh	oh	oh	en	- 'a	-ey	oh
Gloss	VOCA	BLE			mom	my	VOCAE	BLE
Lexical tone	none	none	none	none	none	none	none	none
Morphology ⁶	0	0	0	0	N-S	N-S	A	0

⁶ Morphological coding: 0 = nonlinguistic vocable; A = Affix, N = Noun, O = Other, P = Particle, -S = stem, V= Verb.

The beginning of this song is memorable because of its syncopation; this may be an aid to recollection when a song is needed for a funeral occasion. The rest of the song generally follows a regular duple beat (although some longer-held notes may be variable in their value). The dual kin terms *en'a, soda*, are also unusual in this song; normally a memorial potlatch song refers to the person being honoured with one term only. However, as noted in Neal Charlie's explanation above, this person was respected in dual capacities, and thus appropriately referred to with two terms.

The flatness of the melody in the initial section is typical of memorial songs. These songs are performed without a drum, and the beats, especially in sections with long-held notes, are signaled with rhythmic glottalization.

This type of Minto singing has been described as mournful, and as resembling sobbing, which it does in a sense. However, the placement of the glottal constrictions is too rhythmic to ignore. Consultation with Navajo singers, who perform ceremonial songs without a drum and also with glottal constrictions, suggests that while the voice quality effects in songs of this type certainly pertain to the subject matter in some way (perhaps not exactly the way outsiders have described), they may also perform the function of keeping the beat.

Pitch movement	higher	lower	hioher	flat	hioher	lower	flat	flat
D/U	D	U	D	U	U	D	D	D
Beats		1/2	1	1/2	1/2	3-4	4-5	4-5
	0	0	0		X	X	X	X
	-							
Segmental	oh	oh	oh	en	- 'a	-ey	so-	da
Gloss	VOCAE	LE	ı	moth	er	VOCABLE	my-olo	ler-sister
Lexical tone	none	none	none	none	none	none	none	none
Morphology	0	0	0	N-S	N-S	A	N-S	N-S

Table 7: Dolo K'adi, line 2: Oh oh oh, en'a-ey, soda

Line 2 continues the initial expression including both kin terms. It is noticeable in both lines 1 and 2 that the stem syllable 'a in the word En'a is sung at a higher pitch than other syllables in the line. Special treatment of stem syllables in melody seems to be a pattern in this song.

Pitch movement	higher	flat	flat	flat	flat	higher	flat	falling
D/U	D		U	D	D	U	D	U
Beats	1/2	1/2	1	2	1	1	1	1
Linguistic stress	X		X	X	X	X	X	
Segmental	e	khw	don	'a	ch'u-	kat	di	not
Gloss	just-up	river			shoppi	ng	while	
Lexical tone	none	none	none	none	none	none	none	none
Morphology	A	A	O-S	A	A	V-S	O-S	A

Table 8: Dolo K'adi, line 3: Ekhwdon'a, ch'ukat dinot

The third line begins the recitative-like praise portion of the song. The melody goes to a distinctly higher pitch and stays there, rising again at the first verb stem, -kat. This syllable and the one following occupy the highest pitch in the song. The rhythmic pattern speeds up, with one or more syllables to a beat.

Pitch movement	lower	lower	flat	fallin	risin	rising
				g	g	
D/U	D	U	D	U	D	U
Beats	1	1	1	1	1	2
Linguistic stress	X		X	X	X	X
Segmental	lo	gha	di	t'a	kheł	di
Gloss	handy		you-	are	they-sa	ay
Lexical tone	none	none	none	none	none	none
Morphology	N-S	A	A	V-S	A	V-S

In Line 4, the words themselves are of interest. *Logha dit'a* 'you are handy' is an idiomatic phrase that has not turned up in dictionary sessions or other conversation, and may be archaic or foreign to the modern dialect. *Kheldi* 'they say' may be used here as an evidential marker, but elsewhere in conversation with these elders this word is used something like Koyukon *hel*, as a topicalizer.

Pitch movement	lower	flat	flat	higher	rising
D/U	D	U	U	U	DU
Beats	1/2	1/2	1/2	1/2	2
Linguistic stress		X	X		X
Segmental	ne-	lo'	do	de	lu'
Gloss	your-ha	ınds	praisew	orthy	
Lexical tone	none	low	none	none	low
Morphology	A	N-S	A	A	V-S

Line 5's vocabulary definitely includes 'high language' as the elders identify it. The expression *delu'* is found in conversation and has been recorded in third person only, unconjugated, in dictionary sessions. In the modern language it means 'she or he is cute, charming'. In this verse, the expression is *dodelu'*, which includes the prefix *do-*, which usually brings a verb theme into the realm of things done with the mouth – speaking, singing, etc. In this case, the concatenation would seem to be interpreted something like 'charming to talk of'. As we shall see, the addition of *do-* to a verb theme seems to be fairly common in the non-literal register found in memorial song lyrics.

Singing performance of this line skips the articulation of the glottal stops on the ends of the noun and verb stems. It is not strange to see consonants softened in singing, which seeks to extend sonorous sounds and minimize voicelessness; final glottal stops in particular would interfere with sustained notes in singing. However, there is something else interesting going on here. Both -lo' and -lu', being glottal-final, have low tone in Minto language. They are also verb stems and heavy syllables. These three facts would suggest a contradiction, or melodic problem that needs to be resolved: will the song recognize their morphological prominence, their tone or their prosodic prominence? What happens in Line 5 is that -lo' seems to reflect its tonal specification (the disyllable *nelo*' is flat and low, despite marking of only the second syllable, which is consistent with conversational practice). Its morphological identity, and its full vowel, are not recognized with melodic change or movement. However, the verb stem -lu' gets everything: a moving note, rising pitch and two beats. So the different aspects of Minto prosody play out differently for these two stems that appear in the same line. Is this because one is a noun stem, and one a verb? Examination of the rest of the song suggests some clues.

Pitch	lower	flat	flat	hr	hr	fl	fl	fl	hr	fall	rise	lr
movement												
D/U	D	U	U	D	U	D		U	D	U	D	U
Beats	1	1/2	1/2	1	1	1/2	1/2	1	1	1	1	3–4
Linguistic	X	X		X	X	X		X	X	X	X	
stress												
Segmental	ye'ał	khe	ni	no	do	ch'e	de	na	ghi	loyh	yi	no
Gloss	with-them	they-came			you	you-brought-things-together					whi	le
Lexical tone	low	0	0	0	0	0	0	0	0	0	0	0
Morphology	F-S	Α	Α	V-S	A	Α	Α	Α	Α	V-S	Α	Α

Table 11: Dolo K'adi, line 6: Ye'ał khenino doch'edenaghiloyh yino

In Line 6, the spectacular verb *doch'edenaghiloyh* is also regarded as 'high language'. *Ch'edenaghiloyh*, itself, does mean 'you brought things together'. The reference is to the gathering of food, specifically berries, though they are not literally mentioned. The addition of *do*- here seems to signal that the honoured person did this gathering by means of speaking; but this may also be a tag for praise speech. It would not be surprising to see an Athabascan prefix doing double duty as a literal and nonliteral piece of a larger expression. Inquiring into the melodic and rhythmic marking of stems: in Line 6, both verb stems (*-no* and *-loyh*) are sung differently from surrounding notes; *-no* is higher than the syllable that precedes it, and *-loyh* is given a melodic movement, a fall. With regard to low tone, the low-marked syllable *yel* is indeed sung lower than the notes around it. The fact that it is a function stem, that is, a postpositional stem, does not lift it out of its tonal specification.

Pitch movement flat flat flat flat D/UD IJ D D 3 1 4-5 4-5 **Beats** X X X X Linguistic stress - 'a Segmental da soen Gloss mother my-older-sister Lexical tone none none none none Morphology N-S N-S N-S N-S

Table 12: Dolo K'adi, line 7: En'a, soda

Line 7 brings the melody song back to its head. The melody goes flat and low, the notes are sustained and the beat is felt again in glottal pulses. Following this, Lines 8 and 9 reprise the first two lines of the praise verse (Lines 3 and 4) before shifting to new lyrics.

r						
Pitch movement	flat	flat	higher	higher	lower	
D/U	D	U	D	U	D	
Beats	1	1	1	1	1	
Linguistic stress	X	X	X	X	X	
Segmental	yeł	ni	khw	kheł	di	
Gloss	3-tell	-3	as	they-say	y	
Lexical tone	lo	none	none	lo	none	
Morphology	Α	V-S	0	Α	V-S	

Table 13: Dolo K'adi, line 10: Yelni khw kheldi

In Line 10, there are two low tones (on *yel*- and *khel*-). The whole sequence is sung low and fairly flat, so it is not obvious that these two syllables are treated in a special way because of their tone. Nor are the verb stems -*ni* and -*di* (variants of the same stem) given any special treatment here.

Table 14: Dolo K'adi, line 11: Yeł khenino lo, doyedenaghiloyh dino

Pitch	flat	fl	fl	hr	hr	fl	fl	fl	fl	hr	fall	rise	lr
movement													
D/U	D	U	U	D	U	D	D	U	D	U	D	U	D
Beats	1	1/2	1/2	1	1	1	1/2	1/2	1	1	1	1	3–4
Linguistic	X	X		X	X	X	X		X	X	X	X	X
stress													
Segmental	yeł	khe	ni	no	lo	do	ye	de	na	ghi	loyh	di	no
Gloss	with-3	they-		you-put-them-up									
Lexical tone	low	0	0	0	0	0	0	0	0	0	0	0	
Morpho-logy	O-S	A	A	V-S	A	A	A	A	A	V-S	A	O-S	

In Line 11, however, there is once again a very long verb marked with do-, 'verbal', using the same stem as the long verb in Line 6, but here with a different meaning, 'you put things up' (i.e., preserved food.) The verb references the kind of sex-specific virtue that the deceased is being praised for. The teaching that the elders talk about in these songs is evident in the elaborate praise verbs: this is what you should do, girls, to become a good mother and elder sister.

Pitch movement	flat	flat	flat	flat	
r uch movement	Hat	Hat	Hat	Hat	
D/U	D	U	D	D	
Beats	1	3	4-5	4-5	
Linguistic stress	X	X	X	X	
Segmental	en	- 'a	so-	da	
Gloss	mother		my-older	-sister	
Lexical tone	none	none	none	none	
Morphology	N-S	N-S	N-S	N-S	

Table 15: Dolo K'adi, line 12: En'a, soda

The song ends with a return to the low, sustained, throbbing introduction, with the two kin terms.

The singing elders of Minto have travelled extensively within the state to funerals and potlatches in different Athabascan villages. When a woman has passed away, this song is often sung. As a result, many younger people have learned the song to a greater or lesser extent. When a discussion of this song was presented at the Athabascan Languages Conference in 2010, several Ahtna women in the audience began to sing along. The spread of this song is due both to the teaching efforts of the Charlies and Silases and to the musical and poetic qualities of the song itself.

7. Conclusion

7.1. Summary of linguistic findings

Out of the variety of song and lyrics represented by these examples, a few generalizations are beginning to emerge. First, there is no one generalization regarding the relationship of text to tune and rhythm. Different types of songs require different treatment of language.

In dance songs, rhythm and melody are the winners, and words may have a form very different from their spoken form.

In memorial potlatch songs, choruses amplify and deform simple words, usually kin terms categorizing the person honoured. Praise verses, on the other hand, contain many words, including specific poetic forms not used in normal speech (high language). In these verses, there seem to be some accommodations to lexical tone and especially to morphologically assigned prominence. Differences between musical treatment of metrically and morphologically assigned prominence suggest a need for further research into the status of these two prosodic entities, even in spoken language.

In other, older songs, such as medicine songs and story songs, some words may be lost to time. Those that are remembered may be archaic. However, lyrics are important in these songs as well, and recognition of tone and prominence is present at times.

These findings are not exotic, if we consider the differences in tune-text and rhythm-text matching between musical genres in other cultures. It is natural to expect that a living singing culture will present examples where music is paramount, and examples where text leads the way.

Another interesting fact from the linguistic point of view is the recognition of both low and high-rising tone. Low tone bears little functional load in the language, and its realization is subtle and variable, interacting with intonation. High-rising tone is quite salient, but also interacts with intonation. The fact that both types of tone seem to be referenced in Minto melodies suggests that these prosodic properties of the language may be more important to the identity of Menhti Kenaga' than has been recognized (in teaching materials, for example, while high-rising tone is written, low tone is not.)

The other tantalizing question raised by some of the lyrical language is whether 'high language' can be defined, in part, by lexical or structural properties. Song lyrics may represent the last place where we can find good examples of 'high language', a register that is often discussed, its loss deeply regretted by elders, but of which few examples have been catalogued. The primitive results of this study suggest it is worth looking further for more examples and more explanation.

7.2. The future of song in Minto

Especially given the passing of one of the major singing elders during the time of this project, it is reasonable to ask what the future of song in Minto may be. Based on observation of singers and learners in this project and generally, in the community, the following thoughts come to mind.

It seems likely that musical forms in Minto began to change significantly even with the earliest contact with westerners. While examples of medicine songs, traditional memorial songs and dance songs can still be performed by members of the oldest generation, adaptations to newly introduced musical styles have produced new and fascinating material. Minto singers and speakers keep the new material aesthetically separate from the old, valuing the most conservative material most highly. However, there is clear pride in the existence of more modern dance songs, many using English words in their lyrics, and rowdy delight in the many verses to 'Gallon De'Olee'.

Songs that have been recorded in some fashion, like those presented in this paper or those recorded in audio or video form, will be preserved in one way in written and recorded form, and in another way as pieces of living tradition, possibly changing over time. Those that slip through the academic cracks will survive as long as they are sung, changing as much as they change. This kind of duality, of the preserved vs. the living tradition, has been the case for the language for some time. This project made it clear that musical behaviour and tradition changes too, and that research recording preserves just one slice of it at a time. The preserved moments may provide some assistance in reviving musical material that has passed from use.

It seems unlikely that Minto people will stop singing. The functions of music may seem to be defined differently in the new century than they were a hundred years ago, but the cultural identity of this Athabascan group is strongly tied to music. We look forward to hearing the voices of the next generation as they sing the old songs they remember and the new ones they compose.

References

- Johnston, Thomas F. 1992. The social role of Alaskan Athabascan potlatch dancing. In Lynnette Overby & James H. Humphrey (eds.), *Dance:* current selected research, vol. 3, 183–226. New York: AMS Press.
- Johnston, Thomas F., Madeline Solomon, Eliza Jones & Tupou Pulu. 1978. Koyukon Athabascan dance songs. Anchorage: National Bilingual Materials Development Center.
- Kari, James M. 1990. *Ahtna Athabaskan dictionary*. Fairbanks: Alaska Native Language Center.
- Kari, James M. 1991. Lower Tanana Athabaskan listening and writing exercises. Fairbanks: Alaska Native Language Center. Archived in Alaska Native Language Center Archive, Cat. TNMN981K1991c.
- Kari, James M. 1994. Lower Tanana Athabaskan dictionary, first preliminary draft. Ms. In Alaska Native Language Center Archive, Cat. TN981K1994.

- Krauss, Michael E. 1964. Proto-Athapaskan-Eyak and the problem of Na-Dene: the phonology. *International Journal of American Linguistics* 30(2), 118–131.
- Krauss, Michael E. 1973. Na-Dene. In Thomas Sebeok (ed.), *Linguistics in North America (Current trends in linguistics*, vol. 10), 903–978. The Hague: Mouton.
- Krauss, Michael E. 1974. *Minto noun dictionary*. Fairbanks: Alaska Native Language Center.
- Lundström, Håkan. 1980. North Athabascan story songs and dance songs. In Anna Birgitta Rooth (ed.), *The Alaska seminar*, 126–164. Stockholm: Almqvist & Wiksell International.
- McAllester, David P. 1954. Enemy way music: a study of social and esthetic values as seen in Navaho music. Cambridge, Mass.: Peabody Museum.
- McAllester, David P. 1980. The first snake song. In Stanley Diamond (ed.), Theory and practice: essays presented to Gene Weltfish, 1-27. Berlin: Mouton.
- McAllester, David P. & Douglas F. Mitchell. 1981. *Navajo music*. In Alfonso Ortiz (ed.), *Handbook of North American Indians: volume 10, Southwest*, 605–623. Washington: Smithsonian Institution.
- Pearce, Tony Scott. 1985. *Musical characteristics: Tanana Athabascan dance songs*. Master's thesis, University of Alaska Fairbanks. Includes sound recordings.
- Tuttle, Siri G. 1998. *Metrical and tonal structure in Tanana Athabaskan*. Doctoral dissertation, University of Washington.
- Tuttle, Siri G. 2003. Archival phonetics: tone and stress in Tanana Athabaskan. *Anthropological Linguistics* 45(3), 316–336.
- Tuttle, Siri G. 2009. Benhti Kenaga': Lower Tanana pocket dictionary. Fairbanks: Alaska Native Language Center.