Analysis of mutual influence of music and text in Svan songs

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ABSTRACT

The present paper discusses the influence of musicological, linguistic, and ethnological aspects on the music-text relation in Svan songs. In a lot of cases, there is a deep bond between verbal texts and their musical counterparts (Mzhavanadze & Chamgeliani, 2015). Despite the fact that the lyrics of songs are of critical importance to the rituals in which they are performed, many of them are difficult (at times impossible) to transcribe. The present analysis shows that the reservoir of Svan melos is relatively modest in comparison with the verbal texts. In songs in which musical patterns repeat and texts alter, the latter get modified and often distorted to the degree to make them incomprehensible. This is also true for texts of pre-Christian origin, which has interesting ethnological consequences. The results of the current study challenge the isolated linguistic interpretation of verbal texts of Svan songs and emphasize the need for a joint analysis of lyrics, musical, and ethnological context.

1. INTRODUCTION

Svaneti is a high mountainous region in the West of the Republic of Georgia with its own pronounced sub-culture. The Svan language is one of the four Kartvelian languages – the others being Georgian, Megrelian, Laz. For historical and geopolitical reasons, Svans maintained their unique identity through the transmission of their traditions and customs. Therefore, often the Svan singing repertoire can be distinguished from other Georgian musical dialects through its own distinct musical qualities.

During the summer of 2016, we performed an ethnomusicological field expedition in Svaneti to record a new corpus of traditional Georgian vocal music, praying and lamenting (Scherbaum et al., 2019).[1] During the fieldwork, but also during the creation of the meta-data for the archive of the recordings made, we stumbled on various language-related issues which have the potential to strongly affect any subsequent ethnomusicological analysis. Examples for those issues are that:

- Ethnophores often argue among themselves about which words were the "right" ones to sing although, when asked about the meaning of those words, they often would not be able to translate them.
- Transcription of the text of the songs is a big challenge firstly because the words often are difficult to understand and, secondly, due to the phonetic reservoir (especially vowels in upper Svaneti) of Svans being rich and often having grammatical function. This raises a question about phonetic events being of musical or linguistic origin.
- In contradiction to the hypothesis of some authors that Svan songs are believed to be "song-poems" (Shanidze et al., 1939), the texts often do not show high integrity with the music as they are sung.

This suggests that in order to understand Svans' musical grammar, the interrelationship between music and verbal texts cannot be ignored. The presented paper touches on the issues what role either play in the forming process of a musical (artistic) image.

Since the 1930s, many studies have been devoted to the music-language interface in a wider sense. Regarding Georgian traditional music, the topic has been studied by philologists (Imedashvili, 1959), linguists (Zhghenti, 1963), and ethnomusicologists (Kalandadze, 1992, 1993, 2003; Bolle-Zemp, 2001).[2] In 1965, B. Asafyev astutely described the interaction between the language and music pair as "the pressing of melodic juice from living speech" (Асафьев, 1965, p.7). Concerning the ways of music-language interaction, as various studies show, different types of relationships have been revealed. As W. Bright notes "In many instances it is impossible to say which structure has influenced the other.… There are other examples, however, where it seems clear that music has influenced language, or vice versa" (Bright, 1963, p.26). Some studies show a deep link between musical and verbal texts to the extent that the rules of stress of a word and musical accent often coincide with one another (Palmer & Kelly, 1992) and speech rhythm is reflected in not only vocal but even instrumental music (Patel, 2008). But it is not only spoken language features which may have impact on music. Poetic forms of language also need to be examined since language prosody may not coincide

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[1] https://lazardb.gbv.de/search

[2] Some studies show, that the neglect of musical context while analyzing texts can provide misleading results. For example, some symbols (signs) in manuscripts of medieval hymns were understood as the means of division of poetic lines (Ingoroq'va, 1954), however, these symbols turned out to be in service of musical rather than versification demands (Nakudashvili, 1996)

with the poetic rhythm, because the latter often obeys particular versification rules.

The issue of origins of poetry in Georgian traditional singing repertoire is the subject of an ongoing scholarly dispute. Some argue that a poem has never been an organic part of a song and it could not be a song which later broke up in parts (music and poem) but vice versa – a musical accompaniment was designed to fit in the versification model (Kurdiani, 1998, p.9). Others see a folk poem to be a syncretic phenomenon, arguing that the genesis of a verse as such was triggered by oldest forms of dancing song-poems (Bardavelidze, 1960, p.26) and that songs even reflect measures of poetic lines (Beradze, 1948).

Shanidze et al. (1939) believed that Svan songs can be seen as sung poetry (poetic texts in the preface of the Svan poetry collections are called "simgheraleksebi" meaning song-poems). However, the results of the analysis of the songs do not always support this thought. A Philologist and poet D. Tserediani, who translated Svan poetry into Georgian (Tserediani, 1968), was the first to detect that "a line of Svan poem and musical phrase do not cover each other in choral songs. Apart from refrains, the syllables inserted between words completely change the rhythm of poetic lines" (Barbakadze, 2011, p.246).[1]

In the present study, two core aspects which affect the mutual relation of language and music in Svan songs are examined:

- The degree and type of interrelation between speech prosody and music.
- The relation of the versification model of sung texts with their musical pairs (rhythmic-melodic models).

Below we discuss two selected examples which illustrate how the joint analysis of verbal and musical texture of the songs can help to shed some light on the types and degree of the mutual influence of music and lyrics.

2. EXAMPLES

Svan songs often are the only original sources of information on the history and/or culture of this part of Georgia. In addition, the study of the texts of songs can shed light on some linguistics questions. A. Shanidze, in the preface of the collection of Svan poetry (Shanidze et al., 1939) suggests that Svan poems have preserved "root vowels which have been reduced and extinguished in three dialects of Svan language … and… also in the oldest forms of nouns and verbs, which must have been part of earlier Svan spoken speech" (ibid). In the following, it will be discussed if for the analysis of the lyrics of the "song-poems", the musical structure/context can actually be ignored. By comparing the rhythmic structure of texts with

1	2	3	4	5		1	2	3	4	5
Q'an	saw	Q'i	pyan	e		Q'an	saw	Q'i	pyan	e
um	cha	u	dga	r(a)e		um	cha	u	dga	r(a)e
ul	t'wa	uq'	wro	wa		ul	t'wa	uq'	wro	wa
chor	täy	Char	to	lan		chor	täy	Char	to	lan
zhi	in	zo	ra	lekh		zhi	in	zo	ra	lekh
sol	a	Len	jär	e		sol	a	Len	jär	e
Mes	tya	se	t'ar	e		Mes	tya	se	t'ar	e
Mə	lakh	Mə	zhal	e		Mə	lakh	Mə	zhal	e
Ts'wi	rmi	l	par	e		Ts'wi	rmi	l	par	e
kho	cha	ghwa	zhar	e		kho	cha	ghwa	zhar	e
bar	jas	khas	dän	dakh		bar	jas	khas	dän	dakh
na	mtsa	to	par	e		na	mtsa	to	par	e
də	tkhel	p'i	lar	e		də	tkhel	p'i	lar	e
kho	la	ghwa	zhar	e		kho	la	ghwa	zhar	e
bar	jas	khas	dän	dakh		bar	jas	khas	dän	dakh
jih	ra	tq'e	nar	e		jih	ra	tq'e	nar	e

F**ig. 1** Selected verses of the text of *Q'ansaw Q'ipyane* in its poetic form**.** For further explanations see text.

the rhythmic-melodic structure of the corresponding music it will be demonstrated that the structural characteristics of texts can become strongly conditioned by musical demands. Besides the linguistic aspects, the concept of "song-poems" also gets challenged by considering the effect of the process they undergo while musicalized.

2.1 Q'ansaw Q'ipyane[2]

"Q'ansaw Q'ipyane" is a round dance song with a clear meter and rhythm.[3] It is isorhythmic and the articulation of the text does not change (although the tempo gradually grows faster). As a consequence, the text syllables are equally distributed within the given musical metric-rhythmic frame.[4]

Based on the study of the text of this song, which contains the word *p'ilare*, A. Shanidze hypothesised that this word, which is equivalent to the word *p'irebi* in Georgian (or *persons* in English), must be in its original form and the ending vowel 'e' must have been reduced only in modern day Svan language. If we look at the text systematically, however, we can observe that apart from *pilare* there are other words with the same ending: *tq'enar*(e), *ghwazhar*(e), *lenjar*(e), *məzhal*(e), etc.

In the following we will discuss possible reasons why these words with the ending vowel 'e' could appear in such forms. The first observation of the text is that the lyrics of the song represent a poetic form. The commonly assumed versification model of Svan poetic texts is the so called "maghali shairi". This means that the poetic lines are organized on a metric model of 4 + 4. However, the poetic lines of "Q'ansaw Q'ipyane" are based on a model of 5+5 (**la** la la la la + **la** la la la la) (Fig. 1). A comparison of the metric/rhythmic accents of the text and that of the music shows pretty close alignment. This enables a listener to follow and understand the text of a song despite the additional vowels which are used to fill in the gaps in the sung text. Such an application of extra syllables seems to be conditioned by musical and versification demands. So, apart

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from the prosodic 'o', we have other prosodic vowels such as, in this case, 'e'.

There are several factors supporting the argument for the conclusion that the ending vowel 'e' has a euphonic (poetic and mainly musical) function and that it is not a primarily linguistic phenomenon. The beginning lines of the pure text, as mentioned above, when freed from all extra syllables and vowels, are constructed within a five-syllable temporal frame. This renders the content of the song, via such words as: *umcha-udgara* (ageless and immortal), *uwltwa-uq'wrowa* (un-castrated), *chortay Chartolan* (Chartolan with weird walking legs), etc. These words and expressions are often used to characterize personages, which is a typical feature of Svan ballads. When telling stories, Svans always describe the characters in order to assist visualization of them, to build up an image, to render a storyline and to trigger the relevant emotions. Therefore, commonly, the very beginning lines already, as they start to tell the story, set a specific metric-rhythmic model, which on its own, in turn, sets a measuring example for the remaining lines. In the given song, "Q'ansaw Q'ipyane", the versification model is based on a 5+5 syllable principle instead of 4+4 (which is typical for the Svan poetry) (Fig. 1). Other lines replicate this model. Despite the importance of the actual content of the text, the influence and dominant role of the musical and poetic forms and aesthetics over the information content of the words is clearly manifest. Syllabic vocalization of the text within the given musical model is impossible for a two-syllable foot cannot be equally distributed over a fourfold and a three-step motif. Thus, it naturally requires the filling of the tune with additional phonetic material, which happens at the expense of

Instead of *se-t'ar* (2 syllables) we get *se-t'a-re* (3 syll.), *ghwa-zhär – ghwa-zhä-re* (3 syll.), and *pi-lar – pi-la-re* (3 syll.) (Fig. 2). In Fig. 1 the sung text is shown in its poetic form. The vowels highlighted in red describe poetic and musical events which appear to fill in the 5-syllable poetic model on the one hand, and on the other, to help to fit in with metric and rhythmic model of the tune and complete the musical phrase. That is why these extra vowels appear only in the end of a musical phrase/poetic line and not in the middle of it.

Fig. 2 shows the text coupled with the tune (melodic contour) with its own metric and rhythmic framework. The phonetic units, which are of musical and poetic origin are highlighted in red. Green ones denote the extra vowels/syllables which appear for purely musical reasons. The red lines on the top of the figure show temporal flow of the music within which the appearance of additional vowels is very regular and coincides with either mid-phrase rests or final endings of the phrase. Furthermore, precisely because of the influence of the ending 'e', which at the same time plays as a rhyme-making role in some (including the old archive) recordings, we hear *udgar-e*, although its correct grammatical form is *udgar-a* (cf. Fig. 1. At the end of the second line, the correct ending of the word 'a' is given in parenthesis which is replaced by 'e' highlighted in red).

It seems that musical and versification influences affect a word to the degree that the semantic meaning changes. For example: the correct form of *ghwazh-är* is *ghwazhmāre*: *ghwazh* (a male) and *māre* (a man) while *zuralmāre* means a woman; *ghwazhmārāl* is its plural form – *men*; however, for musical reasons the ending - *zhmārāl* or - *mār* is added the vowel 'e'; Thus, if we make a literary translation of *ghwazhar(e)*, it will mean *one man* which is nonsense
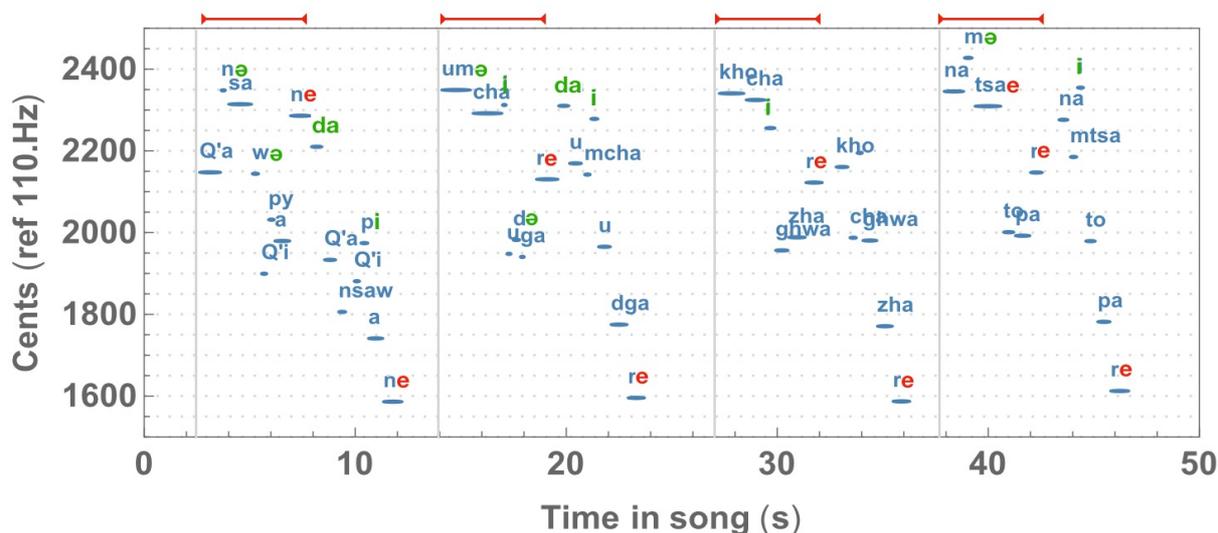

Fig. 2 Text of the sung version of *Q'ansaw Q'ipyane* coupled with the melodic contour.

vowels and peripheral vocabulary. The text therefore becomes "ornamented" in order to fill in the gaps within the musical motif.

As a result, instead of the linguistically correct *Q'an-saw* (2 syllables), in the sung version (Fig. 2) we have *Q'a-nə-sa-wə* (4 syll.), *um-cha* (2 syllables) – *u-mə-cha-i* (4 syll.), etc. In the case of the next "feet" the same pattern applies.

when telling about coward (or brave) men as a group, unless we consider it as mainly a musical event. It is worth noting that in the archives, some of the given words are

sometimes presented in their correct form, i.e. *Ghwazhar,*[1] *lenjār.*[2]

2.2 Ushgulas makheghwazhare

Often in Svan songs, a part of the sung text, including the title is semantically so obscure that it is dismissed as nonsense. Deeper study of such examples, however, may reveal the empathic adoption of certain word fragments during the singing process, which takes place due to musical, mainly rhythmical requirements. A good illustration of this phenomenon is found in the round dance song "Ushgulas makheghwazhare". This song tells the story of young men from Ushguli who went hunting and were killed by avalanche (Akhobadze, 1957, p.31).

Observation of all available variants of the song made at different times reveals that the song often appears under a different title. They are listed below in chronological order:

- *Ushgulas makheghwazhare* (or *Ushgul lasma*), recorded by M. Gujejiani from Beka Gasviani (70) in Khalde village (Shanidze et al., 1939:200-204).
- *Ushgulas makheghwazhare*, recorded by V. Topuria in Ipari village from a teacher Gerasime Gulbani in 1926 (Shanidze et al. 1939:204-206).
- *Ushgulas makhe ghwazhare*, recorded by V. Akhobadze from Giorgi, Ivane and Grisha Nizharadzes in the vill. Ushguli in 1950 (Akhobadze, 1950).
- *Ushgwla lasma*, notated version preserved in the Archive of folklore State Centre. The song was transcribed by E. Sarishvili as it was sung by I. Pilpani in 1959 (Sarishvili, 1959).
- *Zhareda*, recorded by Frank Scherbaum and myself from Ruben Chark'viani in Kutaisi in 2016. (https://lazardb.gbv.de/detail/8079).
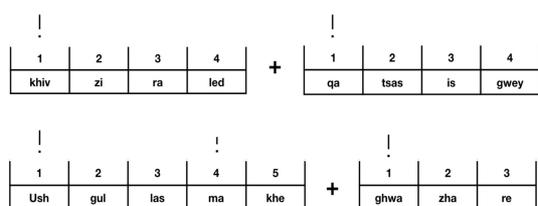

Fig. 3 Versification models used in the poetic form of *Ushgulas makheghwazhare*.

A comparative study of the musical parameters of the above listed variants (except the first two since they depict only the text) reveals firm resemblance of the melodic contour and harmonic vertical. The variants of R. Chark'viani and I. Pilpani are almost identical. A couple of significant details concerning the ways of coupling the words and tune, as well as the vocable segments of the song also have been observed.

Most of the poetic lines without vocables are constructed by the versification model of "maghali shairi"(4+4) (some-times "dabali (5+3) shairi") (Fig. 3). The peripheral vocabulary of the sung text appears to differ, however. For example, the variant recorded in 1936 starts with the word *arida* (Shanidze et al., 1939:200), whereas the one dated by 1950 (from Ushguli) says *zhare da* (Akhobadze, 1950). In the manuscript from 1959 we read *zhaleoda* (Sarishvili,1959), whereas R. Charkviani (from Ushguli by origin) also calls the song *zhareda* as he starts the song with it (https://lazardb.gbv.de/detail/8079).

Apart from this, as mentioned earlier, the first line of the song (which often represents the title of the song without any changes) is read/sung differently:

Arida… ushgul lasma khilghwazhaled (Shanidze et al., 1939, 200)
Zhare da … Ushgulas makhe da ghwazhareda (Akhobadze 1950)
Zhaleoda… Ushguliwo lasmasai khelghwaio zhale (Sarishvili, 1959)
Zharedai… Ushguliwo lasmawo khelghwaia zhare da (R. Charkviani (https://lazardb.gbv.de/detail/8079)

Fig. 4 demonstrates the process which the given line undergoes while musicalized. Exclamation marks label the musical accents which split the words and make linguistically illogical stress on syllables and a listener perceives a nonsense verbal unit as a word (Fig. 4 a, b). They mark the strong beat of the musical metre. The syllables given in black are non-grammatical segments, "fillers" (Fig.: 4a, 4b). The words split due to musical demands are highlighted respectively in green and blue (Fig. 4 a-c).

As a result, if we read the words as they are adapted with the musical phrases, we can discern that the accents occur on linguistically irrelevant syllables and therefore, the sentence makes no sense (Fig. 4c).

Although it is easier to correctly read the ending part of the phrase, transcription of the middle part is complicated because it becomes semantically very obscure due to the singling out of the segment *lasma* as a separate word. In fact, it is a product of the artificial union of the suffix of the previous word: **- las** and prefix of the word after: **ma - (las+ma)** (Fig. 4c).

Due to the dominance of the music, and the influence of musical metric accentuation, the spoken "guts" of the word dissolves into chaos, altering our perception of the literal meaning of the word. So, informants automatically name the song not by a separate title, but instead by the first words of the opening phrase of the song and thus, the song becomes "Ushgul lasma" – a title devoid of any real meaning.
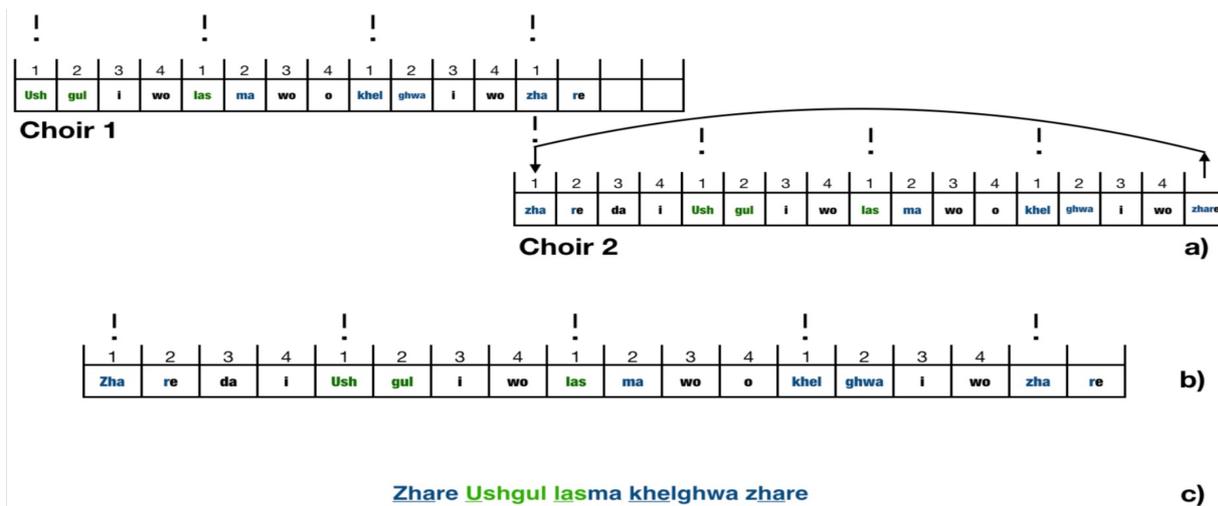

Fig. 4 Modification of text patterns in the lyrics of the song *Ushgulas makheghwazhare* during the musicalization.

Often, after a word gets fragmented due to musical demands, this fragment obtains totally musical function as it can repeatedly appear in the song. An example of this can be the word *zhareda*, which is typically sung at the end of a musical phrase. This has a strong definitive beat, with the accent on <u>*zha*</u>. However, as mentioned above, *zhar(e)* is in fact the second segment of the actual word *makheghwazhar(e)*. *zhar(e)* is therefore used in this context to distribute the text over the musical phrase. The given part of the word then becomes the refrain which is heard repetitively by both choirs and which although semantically degraded, gains its own independence as a euphonic tool (Fig. 4).

3. DISCUSSION AND CONCLUSIONS

The joint analysis of a wider singing repertoire of Svans made it possible to describe types of interrelation between words and music. In addition, songs featuring a similar type of language-music relationship, are also closely related musically and share the ethnological context. For example: in some sacred ritual hymns with extended recitative parts, words and music interrelate differently than those in dance songs with a clear rhythm and meter (Mzhavanadze, 2018).

The results of the present analysis challenge two scholarly hypotheses: a) that archaic features of the Svan language have survived in texts of Svan songs; b) that Svan poetry is of syncretic origin and represent song-poems.

Instead, we observe that musical imperative repeatedly relegates linguistic expression to a subordinating role. We illustrated how the status of a word can change by the addition of extra vowels (for example in "Q'answ Q'ipyane"). In this context, the analysis of the verbal text without considering its relation with the musical structure can lead to wrong conclusions. In this way too, textual patterns can mistakenly be assessed as a linguistic phenomenon (cf. words such as *p'ilare* or *topare* etc. which are wrongly seen simply as older forms of given words). In addition, there are often occasions where the music takes precedence to the text in even more dominant ways, using segments/fragments of words for euphonic, music structure forming purposes. In this case these fragments are ripped off their semantical meaning, with the resultant loss of any concrete message. Such is the inherent power of this process that even more extraordinarily, these fragmented segments, can turn into actual refrains. In the most extreme cases, they can re-appear as the very title of a song, such as e.g. "Ushgul lasma". Most of the Svan poetic texts are not of ontologically synthetic origin because on the one hand their poetic forms as well as the verbal units get distorted as they are sung, and, on the other hand, because without music they have their own versification mode.

On more general level, we have noted that the Svan intonation inventory is rather limited and its rhythmic-melodic constructs are multiply used. As a consequence, verbal texts are being modified and even distorted due to the shift of their rhythmic accents. This sometimes leads to morphological changes of words and to semantic ambiguity. In order to fill the gaps in the existing musical rhythmic-melodic constructions/phrases, multiple phonetic units (vowels, syllables) are inserted in the process of musicalization. This may have the effect that the resulting **musical constructs are more stable and longer lasting than the original textual ones.** Such a stability and "dominance" of musical features could be explained by the hypothesis that the musical frame would be of older origin than the current texts.

Apart from this, we feel that a comprehensive multidisciplinary study of Svan repertoire could further reveal peculiarities of the local musical language and help identify the rhythmic-melodic constructs which may have been imported from neighboring regions/dialects of Georgian traditional music. This, however, is the subject of future research.

4. ACKNOWLEDGEMENTS

5. REFERENCES

Akhobadze, V. (1950). *Archive Materials (notated transcriptions) of The Folklore State Center of Georgia* (No. #1824). Tbilisi.

Akhobadze, V. (1957). *Kartuli khalkhuri simgherebis k'rebuli (Collection of Georgian folk songs)*. Tbilisi: T'eknik'a da shroma.

Barbakadze, T. (2011). *Kartuli leksmtsodneobis ist'oria (History of theory of Georgian poetry)*. Tbilisi: Lit'erat'uris inst'it'ut'is gamomtsemloba (Publishing house of the Institute of Georgian Literature).

Bardavelidze, J. (1960). *Kartuli khalkhuri lekstts'q'obis sak'itkhebi (Versification issues in Georgian folk poetry)*. Tbilisi: Georgian SSR Academy of Sciences.

Beradze, P. (1948). Hegzamet'ris sak'itkhisatvis (On the issue of hexameter). *Mnatobi*, (7), 140–148.

Bolle Zemp, S. (2001). Khmovnebi da ak'ordebi. Simghera zemo Svanetshi (Vowels and chords. Singing in Upper Svaneti). In R. Tsurtsumia (Ed.), *Sasuliero Da Saero Musik'is Mravalkhmianobis P'roblemebi (Problems of Polyphony in Sacred and Secular Music)* (pp. 292–303). Tbilisi: Tbilisi State Conservatoire (in Georgian with English summary).

Bright, W. (1963). Language and Music: Areas for Cooperation. *Ethnomusicology*, 7(1), 26–32.

Gippert, J. (2002). TITUS; Svan Poetic Texts. Retrieved March 19, 2019, from http://titus.uni-frankfurt.de/texte/etca/cauc/svan/svapo/svapo.htm

Gippert, J. (2002). TITUS; Svan Prose Texts. Retrieved March 19, 2019, from http://titus.fkidg1.uni-frankfurt.de/texte/etca/cauc/svan/spto1/spto1.htm

Imedashvili, G. (1959). Kartuli k'lasik'uri sagaloblis p'oet'ik'is sak'itkhebi (Issues of poetic speech of a Georgian classical chant). In *Literaturuli Dziebani (literary investigations)* (pp. 177–193). Tbilisi.

Ingoroq'va, P. (1954). *Giorgi Merchule. Kartveli mts'erali meate sauk'unisa (Giorgi Merchule. A Georgian writer of the 10th century)*. Tbilisi: Sabch'ota Mts'erali.

Kalandadze-Makharadze, N. (1992). *Kartuli khalkhuri simgheris p'oet'uri da musik'aluri t'ekst'is shinaarsobrivi urtiertmimartebis p'roblema: glosolaliis sak'itkhisatvis (Problem of interrelation between of poetic and musical texts of Georgian folk songs: an issue of glossolalia)* (No. 5910). Tbilisi.

Kalandadze-Makharadze, N. (2003). Mravalkhmiani kartuli khalkhuri sasimghero met'q'velebis erti art'ik'ulatsiuri taviseburebis shesakheb (On one peculiarity of articulation in Georgian polyphonic singing). In J. Tsurtsumia, Rusudan and Jordania (Ed.), *The First International Symposium on Traditional Polyphony.* (pp. 340–349). Tbilisi: International Research Center for Traditional Polyphony of Tbilisi State Conservatoire.

Kalandadze-Makharadze, N. (1993). *P'oeturi da musik'aluri t'ekst'is semant'ik'isatvis kartul folk'lorshi (On semantics of poetic and musical texts in Georgian folklore)* (No. 5910). Tbilisi.

Kurdiani, M. (1998). *Saerto-Kartveluri versipik'atsiuli sist'ema da lekst'ts'q'obis zogadlingvist'uri teoria. (Common-Kartvelian versification system and general linguistic theory of versification)*. Academy of Sciences of Georgia. Arn. Chikobava Institute of Linguistics.

List, G. (1963). The Boundaries of Speech and Song. *Ethnomusicology*, 7(1), 1–16. https://doi.org/10.2307/924141

Mzhavanadze, N. (2018). *Svanuri sak'ult'o rit'ualis musik'ologiur-antrop'ologiuri asp'ekt'ebi (Musicological and anthropological aspects of Svan aacred aitual)*. Ilia State University. Retrieved from https://drive.google.com/file/d/1-Q1-1a7SWLHKJrW2_XaAWVC4dvl6zPLH/view

Mzhavanadze, N., & Chamgeliani, M. (2015). On the Problem of Asemantic Texts of Svan Songs. *Kadmos*, 7(8), 49–109.

Nakudashvili, N. (1996). *Himnograpiuli leksis st'rukt'ura (Structure of a hymnographic text*. Tbilisi: Metsniereba.

Palmer, C., & Kelly, M. H. (1992). Linguistic prosody and musical meter in song. *Journal of Memory and Language*, 31(4), 525–542. https://doi.org/10.1016/0749-596X(92)90027-U

Patel, D. A. (2008). *Music, Language, and the Brain*. Oxford: Oxford University Press.

Powers, H. S. (1980). Language Models and Musical Analysis. *Ethnomusicology*, 24(1), 1–60.

Sarishvili, E. (1959). *Archive Materials (notated transcriptions) of the Folklore State Center of Georgia* (No. # 4227). Tbilisi.

Scherbaum, F., Mzhavanadze, N., & Dadunashvili, E. (2018). A web-based, long-term archive of audio, video, and larynx-microphone field recordings of traditional Georgian singing, praying and lamenting with special emphasis on Svaneti. In *9. International Symposium on Traditional Polyphony, Oct 30 - Nov 3.* (p. Submitted).

Scherbaum, F., Mzhavanadze, N., Rosenzweig, S., & Mueller, M. (2019). Multi-media recordings of traditional Georgian vocal music for computational analysis. In *9th International Workshop on Folk Music Analysis, FMA 2019, Birmingham, July 2-4.* (p. Submitted).

Shanidze, Akaki. Topuria, Varlam. Gujejiani, M. (1939). *Svanuri p'oezia (Svan poetry).* (M. Kaldani, Ed.) (2014th ed.).

Tserediani, D. (1968). *Svanuri khalkhuri leksebi. Irinola (Svan folk poems. Irinola)*. Tbilisi: Sabch'ota Sakartvelo.

Zhghenti, S. (1963). *Kartuli enis rit'mik'ul-melodik'uri st'rukt'ura (Rhythmic-melodic structure of Georgian language)*. Tbilisi: Tsodna.

Асафьев, Б. (1965). *Речевая интонация*. Ленинград: Гос. муз. издательство (Музгиз).