

Bulgarian Folk Songs in a Digital Library

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Digital Preservation and Presentation of Cultural and
Scientific Heritage, 11-14 September 2011, Veliko Tarnovo

Outline

- 1 Introduction
- 2 The Collection
 - Description
 - Meta-data
- 3 Search Engine
 - Search Query
 - Search Result Table
 - Google Maps Visualization
- 4 Future Developments
 - Vassil Stoin Project
 - International Collaboration

Information technologies for presentation of Bulgarian folk songs with music, notes and text in a digital library

Folklorists and computer science specialists from five institutions:

- Institute of Mathematics and Informatics, Bulgarian Academy of Sciences (BAS)
- Institute of Art Studies, BAS
- Institute for Ethnology and Folklore Studies with Ethnographic Museum, BAS
- Faculty of Mathematics and Informatics, Sofia University "St. Kliment Ochridski"
- Department Informatics, New Bulgarian University

Information technologies for presentation of Bulgarian folk songs with music, notes and text in a digital library

Partially supported by Grant number DTK 02/54/ 17.12.2009 of the Bulgarian National Science Fund – the Ministry of Education, Science and Youth.

<http://www.math.bas.bg/or/nkirov/2010/folk/FOLK.html>

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- 1 Introduction
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 - Search Query
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Description

Sources

The sources for our collection are the archives from:

- National Center for Intangible Cultural Heritage at the Institute for Ethnology and Folklore Studies with Ethnographic Museum, and
- Institute of Art Studies.

They are a part of the scientific heritage of Prof. **Todor Dzidzev** – over 1000 songs from Trakia region that were recorded and written down during the 60s and 70s of XX century.

Description

Sources

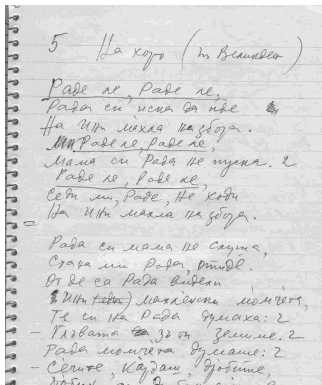
- About 2000 typewritten pages with handwritten notes, and text of songs

Handwritten musical score for a Bulgarian folk song. The score is written on three staves. The first staff is in 4/4 time and begins with the tempo marking "1 = 4/4". The lyrics under the first staff are: "Еж-ме ма, ми-ме, ти - ма-га". The second staff continues the melody with lyrics: "888-де сти ма-ки при ма-ма". The third staff concludes the piece with lyrics: "когато почнем да наемем, ама мама ти го донелазе; когато връгнем на нива всички си вече детето, на мама диват отошките." The manuscript includes various musical notations such as notes, rests, and dynamic markings. The page is numbered "72-136, 1, 16" in the top right corner. At the bottom of the page, there is a printed note: "Изл. Отец Георгиев Гайдаров от с. Победа, Бялознаво, р. 1895 г. Записал и поправил Тодор Димитров."

Description

Sources

- 27 old magnetic types with original performances of songs
- 13 note-books with handwritten texts of the songs and additional notes



Description

Digital Representation – Notes

The notes are presented in a form of LilyPond coding (plain text files).

```
\score{
\relative c' {
\tempo 4 = 144
\time 2/4
d4·f·|·\acciaccatura·f8·g2·|·d4·f·|·g2·|
\varA
·\acciaccatura·a8\startTextSpan·g4\glissando·f16(·ees·c8)·\stopTextSpan·|·d4·f·|
\varB
·\set·Score·measureLength·=·#(ly:make-moment·3·4)
·s4\startTextSpan·g2\stopTextSpan·|
·\set·Score·measureLength·=·#(ly:make-moment·2·4)
f8(·e^(v))·d4·d2·d4·d
\bar·"|"·"·s8·\fixB·gis,4·\fixC·s8·\bar·"|"·"
\endm
\varA
·g'8\startTextSpan\prall(·f)·f16([·e·c8])·\stopTextSpan·\bar·"|"·"
\varB
·g'4·\startTextSpan(·a8)·\stopTextSpan·\bar·"|"·"
\varB
·g4·\startTextSpan(·f8)·\stopTextSpan·\bar·"|"·"
}
\addlyrics{·Еж·те·ми,·пей·те,·пи·лян·ца·дур·де·сти·мал·ки·при·ма·ма·}
_
```

Description

Digital Representation – Notes

Print view of the song's notes (pdf and eps files).

The image shows a musical score for a Bulgarian folk song. It consists of two staves of music in 2/4 time, with a tempo marking of quarter note = 144. The lyrics are in Bulgarian. The first staff contains the lyrics: "Еж- те ми, пей- те, пи- лян- ца дур- де". The second staff starts with a measure rest of 7 measures, followed by the lyrics: "сти мал- ки при ма- ма". The score includes various musical notations such as notes, rests, and ornaments. There are also some performance markings like "1" and "2" above notes, and a key signature change to one sharp (F#) at the end of the second staff.

♩ = 144

Еж- те ми, пей- те, пи- лян- ца дур- де

7 2--- 1 (1) 1--- 2--- 2---

сти мал- ки при ма- ма

Description

Digital Representation – Text

The texts and meta-data of the songs are stored in the library of the form of LaTeX coding (plain text files).

```
%Ежте ·ми , ·пейте , ·пилянца¶  
%На ·хоро¶  
%Джиджев :хороводни¶  
\begin{multicols}{2}¶  
Ежте ·ми , ·пейте , ·пилянца ,¶  
дурде ·сти ·малки ·при ·мама .¶  
Аз , ·га ·бях ·малка ·при ·мама ,¶  
бяла ·бих ·като ·кадъна , ·(2)¶  
червена ·като ·ябълка :¶  
където ·ходя , ·все ·пея ,¶  
в ·градинка ·вляза ·и ·пея!¶  
.....¶  
когато ·тръгнем ·на ·нива ,¶  
всяка ·си ·земе ·детето ,¶  
на ·мене ·дават ·стомните!¶  
\end{multicols}¶  
\singer{Пял : ·Стоян ·Гьоргеv ·Гайдаров}¶  
\village{с . ·Победа}¶  
\area{Ямболско}¶  
\year{1895}¶
```

Description

Digital Representation – Text

Print view of the song's text (pdf and ps formats).

Ежте ми пейте пилянца,
дурде сти малки при мама.
Аз га бях малка при мама
бяла бих като кадъна,
червена като ябълка,
където ходя все пея,
в градинка вляза и пея.
А сега пиленца, а сега,
даде ма майка ми, даде ма
през девет села в десето
при девет млади итърви
и девет зълви се моми,

едно ми младо деверче
и една ми стара свекърва.
Когато почна ляп да меса,
аз меса тя го премиса;
когато почна да пера,
аз пера тя го препира;
когато почнем да межем,
аз мажа тя го премазва;
когати тръгнем на нива
всяка си земе детето,
на мене дават стомните.

Description

Digital Representation – Music

- The music records consist of authentic performances of folk songs, digitized from old magnetic tapes (MP3 format files)
- Music, produced by LilyPond system – computer interpretation of the notes (MIDI files)

Description

Digital Representation – Manuscripts

The handwritten note-books from the research expeditions are presented in a form of page images (jpg format files)

26 п. На поученя
Рачо о Радна рачина
Рачинко Радна рачина
Немаме олака ноща
и и
Ноща и нощулки
Рачо о Радна рачина
Еве бела млада за вода
Взи пак а от дна дупрва
Оваго да ѝ не види
Оче лесеца
и на водито звездице и н. 4.

27 п. (на поученя (на млада))
"Над млада от прака ѝ гуга"
Млада бела млада
Млада млада млада
Блако вна дупрва
Ти се се спеша

28 п. На млада
Гугрин добрин казана
Родичи бела дотраки

29 п. На млада (на сватбени)
Канда е рудо млада
Вре дена Зака гадна

30 п. На млада
Виде бела бела бела
Бела млада
Иво рачо до млада бела
Млад бела бела
Вода на млада бела
Ива дупрва на млада

31 п. На млада (на млада)
Млада млада бела
И млада рачо млада

32 п. На млада (на млада)
Руча Руча млада Руча бела
Рачина се млада Руча бела

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Meta-data

Based on the expertise of the scientific team of the project the following meta-data components of recorded and notated folk songs were identified and defined:

- title
- context implementation
- genre of the song on a functional basis
- name, date and birthplace of the singer
- name of the recorder
- place and time of the recording

Search Engine

The presented here search engine can be used as web application for keyword-based searching in our library. The folklore songs are provided as an index of digital content – lyrics, notes and images. This engine could be used by professionals in the field of folklore research to look for common motives, characters and similarities between different songs. These could be songs from different parts of Bulgaria, variants of the same song or simply common keywords.

Outline

- 1 Introduction
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- 3 Search Engine**
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Search Query

The search engine provides a Google-like web interface that would be used for searching in the library. It uses a search phrase (query) which could contain data as well as meta-data.

Рада

В ТЕКСТ ПО КЛЮЧОВИ ДУМИ В ТЕКСТ, СЕМАНТИЧНО В НОТЕН ЗАПИС

Търсене

Търсене в 1071 български народни песни

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Search Result Table

The search result table contains the songs that match a given search query

Резултати от търсене за: **Ежте**

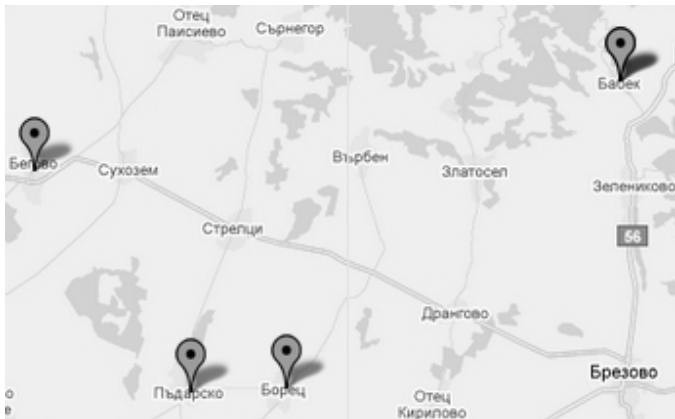
Код на песента	Съвпадение	Контекст	Lilypond PDF EPS					Изпълнение	MIDI музика	Изображения
			Текст	нотен запис	нотен запис	нотен запис	Изпълнение			
td_136_1_16	0.56	... Ежте ми, пейте, пилянца %На хоро %Джиджев:хороводни $\begin{matrix} \{2\} \text{ Ежте ми, пейте, \\ \text{ пилянца,} \\ \text{ дурде сти малки при мама.} \\ \text{ Аз, га бях малка при мама,} \\ \text{ бяла бях като...} \end{matrix}$.txt	.ly	.pdf	.eps	.mp3	.midi		
td_139_2_10	0.50	%Йелка момаре дойдаха %Седенкарска (на летни погрелки) %Джиджев:седенкарски $\begin{matrix} \text{ \begin{matrix}майка \{и\} посрещна} \\ \text{ и на момаре думала:} \\ \text{ -- Ежте и пейте, момаре,} \\ \text{ и си със здраве...} \end{matrix} } \end{matrix}$.txt	.ly	.pdf	.eps	.mp3	.midi	.jpg .jpg	
td_170_2_07	0.35	%Посъбра Гълъб, Гълъбо %На хоро %Джиджев:хороводни %%този и следващите записи са..... думаше: %%"Гълъб" вм. "и на" - според записа -- Ежте и пейте, дружина, и се вълеле	.txt	.ly	.pdf	.eps	.mp3	.midi		

Outline

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- 2 The Collection
 - Description
 - Meta-data
- 3 Search Engine**
 - Search Query
 - Search Result Table
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Google Maps Visualization

In every step of the search process, a link is provided that could visualize the resulting songs in Google Maps.



Outline

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- 2 The Collection
 - Description
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 - Search Result Table
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Future Developments

Vassil Stoin Project

Vasil Stoin is one of them and we propose to start with the digitization of books, which are published in a result of Stoin's project in the 20s of XX century.

- Vassil Stoin collections (books and unpublished records) are a valuable treasury of folk music heritage of Bulgaria
- Much of the notated songs published in these books have long been forgotten and not persist in the musical practices of Bulgarians. If they are published again and equipped with sound examples, these songs can be sung again by the modern and future fans of Bulgarian folk music
- Only single specimens from the collections are saved today, wasted by the time and usage. Many of these songs are threatened with extinction
- To our knowledge, Bulgaria is the only Balkan country that

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Future Developments

International Collaboration

Our achievements are also a good base for international collaboration in the field of authentic folk songs digitization.

- One perspective is to take in mind the common features of Balkan folklore (Romania, Serbia, Macedonia, Greece, Turkey), and
- other is to attract Cyrillic alphabet countries (Serbia, Macedonia, Bosnia and Herzegovina, Ukraine, Belarus, Russia).

An extended collection of digitized authentic folk songs from several countries can generate many investigations about common roots of popular customs and culture of the people in these countries.



:(10k U 4 Ur attention! :)

<http://www.math.bas.bg/or/nkirov/2010/folk/FOLK.html>

Благодаря Ви за вниманието!