

Institute for Musicology
Hungarian Academy of Sciences

Technical Challenges and
Developments in 21st Century
Folk Music Archiving



11 – 12 June, 2008

Institute for Musicology
H – 1014 Budapest, Táncsics Mihály u. 7.
Bartók Hall

Wednesday, 11 June 2008

Chair: János Fügedi

- 09:30 – 09:45 **Tibor Tallián** (director of Institute for Musicology, HAS)
Welcome address
- 09:45 – 10:45 **Dietrich Schüller** (Vienna)
Ethnomusicology and Audiovisual Documents: Challenges and Solutions at the Dawn of Digital Age. Keynote paper
- 10:45 – 11:15 **Ewa Dahlig-Turek** (Warsaw)
Between Yesterday and Tomorrow: Archive in Transition
- 11:15 – 11:30 Coffee Break
- 11:30 – 12:00 **Helen Kõmmus** (Tartu)
Ethnomusicological Field-Work and Technical Progress in Context of Folk Music Festival Research in Estonia and Finland
- 12:00 – 12:30 **Rastko Jakovljevic – Jelena Jovanovic** (Beograd)
Challenges and Developments in Digitalization project in the Institute of Musicology SASA, Belgrade
- 12:30 – 13:00 Discussion
- 13:00 – 14:30 Lunch

Chair: Louis Grijp

- 14:30 – 15:00 **Peter Vendramin** (Ljubljana)
Preparation and Incorporation of Sound in a Digital Archive
- 15:00 – 15:30 **János Fügedi** (Budapest)
Comparing Methods of Digitizing 16 mm Archive Films
- 15:30 – 16:00 **Ivar Mogstad** (Trondheim)
Digitalization of Egil Bakka's collection
- 16:00 – 16:15 Discussion
- 16:15 – 16:30 Coffee Break
- 16:30 – 17:00 **Matěj Kratochvíl** (Prague)
Historical Recordings in the Collections of the Institute of Ethnology of the Czech Academy of Sciences
- 17:00 – 17:30 **Maurice Mengel** (Berlin)
Metadata Interoperability of Digital Archives: Connecting Different Ethnomusicological Archives with ethnoArc
- 17:30 – 17:45 Discussion

Thursday, 12 June 2008

Chair: Ewa Dablig-Turek

- 09:30 – 10:00 **Pál Richter** (Budapest)
Endless Job — Past, Present and Future in the Folk Music Archives of the Institute for Musicology of Hungarian Academy of Sciences
- 10:00 – 10:30 **Sándor Manno** (Budapest)
Playing Phonograph Cylinders with the Technology of the 21st Century
- 10:30 – 10:45 Coffee Break
- 10:45 – 11:15 **Zoltán Juhász** (Budapest)
Contour Analysis of Different European and Asian Folksong Corpora Using Self Learning Algorithms
- 11:15 – 11:45 **János Sipos** (Budapest)
Using Artificial Intelligence for Comparative Musicology on Eurasian Folk Music – In the Wake of a Special Musical Structure
- 11:45 – 12:15 **Louis Grijp** (Amsterdam)
Diachronic Research in the Dutch Song Database
- 12:15 – 12:30 Discussion

Chair: Pál Richter

- 12:30 – 13:00 Presentation: From Field Work to Internet (1st part)
- 13:00 – 14:30 Lunch
- 14:30 – 15:00 **István Pávai – András Mórocz** (Budapest)
Complex Folklore Database Project
- 15:00 – 15:30 Presentation: From Field Work to Internet (2nd part)
- 15.30 – 16.00 Discussion (*Summary, Common Tasks, Cooperation, Closing*)

Dietrich Schüller

Ethnomusicology and Audiovisual Documents: Challenges and Solutions at the Dawn of Digital Age. Keynote paper

Phonogrammarchiv
Austrian Academy of Sciences, Vienna
dietrich.schueller@oeaw.ac.at

Ewa Dahlig-Turek

Between Yesterday and Tomorrow: Archive in Transition

The sound archive of the Institute of Arts of the Polish Academy of Sciences (ISPAN) is a good example of a collection which made a big step from the 19th directly to the 21st century. Like many other institutions in this part of Europe, it suffered serious underfinancing which led to gradual deterioration of sound carriers and gave no chance for improving access to metadata. Recent changes in the attitude toward cultural heritage, partly imposed by the EU policy, result in better understanding showed by the financing agencies to the needs of unique repositories of folk music culture. Still, new possibilities are not limitless and the progress must be made with rather modest means. International co-operation on pan-European level opens new perspectives in this respect, like EU co-funded project DISMARC (DIScovering Music ARChives), in which ISPAN is participating.

The paper will discuss solutions accepted in ISPAN for the transition period, trying to strike a compromise between limits of yesterday, possibilities of today and technical demands of tomorrow.

Institute of Arts
Polish Academy of Sciences, Warsaw
ewa.dahlig-turek@ispan.pl

Helen Kõmmus

Ethnomusicological Field Work in the 21st Century: Video Cameras, Multi Channel Recordings and the World Wide Web

The aim of the presentation is to discuss the challenges that ethnomusicological field work is meeting in the 21st century.

In today's informational technology society, people are used to being observed by security cameras in public spaces and by different programs on the internet.

Digital technology has secured a place in cultural field work as well, with all its pros and cons.

A part of the project "Perspectives of music in constructing the Estonian open identity" carried out by the Department of Ethnomusicology of the Estonian Literary Museum 2008-2012 has been orientated towards festival culture. Our interest is focused on the Baltic countries' biggest Viljandi Folk Music Festival, which takes place in the South-Estonian town of Viljandi. This fusion festival gives a good possibility to observe the interaction and influences between traditional and popular music.

During the 4 days long festival in 2007 July our field work team used different kind of technical equipment, for example video and digital cameras, a multi channel recording, mini-track recorder etc. One complicated but generous folkloristic and ethnomusicological field work environment is internet. After festival we used world wide web as research material source of media reception and chat forums. This whole field work experience gives a good possibility to discuss about process of technically supported observing in urban environment and technical and ethical problems that are following it.

Department of Ethnomusicology
Estonian Literary Museum, Tartu
helen@folklore.ee

Rastko Jakovljevic – Jelena Jovanovic

Challenges and Developments in Digitalization Project in the Institute of Musicology SASA, Belgrade

Institute of Musicology
Serbian Academy of Sciences and Arts, Beograd
music_inst@sanu.ac.yu

Peter Vendramin

Preparation and Incorporation of Sound in a Digital Archive

The paper presents the way ethnomusicological material is properly prepared, treated and handled in order to be used in a digital archive. The paper is divided into two sections. The first gives focus on the types of archive material, its maintenance methods and on the procedure of digitization. It is important to present the distinction between the analog and older digitized records on carriers on one side and the new digital records in file format on the other. Both types of material have to be treated adequately. In order to use the archive efficiently, the material has to be compressed and converted (due to its excessive size) into appropriate format.

The second section gives overview of the effective use of ethnomusicological material in the digital archive, which is the result of the national funded project Ethnomuse. Implemented solutions in the archive enable better access and usage of digitized multimedia material and give support to processes that relate to collecting, documenting, archiving and scientific usage of Slovene folk songs, music and dance.

The Institute of Ethnomusicology
Slovene Academy of Sciences and Arts, Ljubljana
Peter.Vendramin@zrc-sazu.si

János Fügedi

Comparing Methods of Digitizing 16 mm Archive Films

Department of Folk Dance, Institute for Musicology
Hungarian Academy of Sciences, Budapest
janos.fugedi@zti.hu

Ivar Mogstad

Digitalization of Egil Bakka`s collection

The paper summarizes the project (finished last year) with scanning and digitalizing Egil Bakka`s 8mm collection with over 600 super-eights (period 1966-74). The last nearly half part of it (period 1972-74) was filmed by an amateur standard Bell&Howell-camera with technical synchronizing to a cassette recorder. We have, thanks to film/video, sync-sound, music and dance knowledge in cooperation, been able to use this material with rather good (mostly correctly synchronized) results.

The Norwegian Council for Traditional Music and Dance, Trondheim
ivar.mogstad@hf.ntnu.no

Matěj Kratochvíl

Historical Recordings In The Collections Of The Institute Of Ethnology Of The Czech Academy Of Sciences

The Institute of Ethnology houses a collection of historical recordings of folk music from different periods and stored on various media. In my paper, I would like to address issues connected with their cataloging and transfer to digital form. In particular, I would like to focus on collection made between 1929-1937, which was created by The Phonographic Committee of Czech Academy. These recordings cover the area of then Czechoslovak republic and were ment to represent its cultural diversity at that time.

Ethnological Institute
Academy of Sciences of the Czech Republic, Prague
kratochvil@eu.cas.cz

Maurice Mengel

*Metadata Interoperability of Digital Archives:
Connecting Different Ethnomusicological Archives with ethnoArc*

Department for Ethnomusicology
Ethnological Museum, Berlin
mauricemengel@gmail.com

Pál Richter

Endless Job — Past, Present and Future in the Folk Music Archives of the Institute for Musicology of Hungarian Academy of Sciences

Folk Music Archives, Institute for Musicology
Hungarian Academy of Sciences, Budapest
richter@zti.hu

Sándor Manno

*Playing Phonograph cylinders with the technology of the 21st century
SZTANOGRÁF – the contactless recordplayer
(Fekete József, Manno Sándor, Torma Balázs DiFiLTON-ARC Kft.
Németh István MTA-ZTI)*

The main properties of the SZTANOGRÁF:

- The sound recorded on the cylinder is retrieved using a ray of light
- Following and focusing on the groove is done automatically
- It doesn't harm the surface that contains the recording
- The lack of a mechanical needle reduces the distortion
- Even cracked and broken records can be read
- The large number of data samples and the data mining, retrieving methods, result in a more precise reconstruction. There will be less noise and distortion

DiFiLTONARC Digitális Film-, Hang- és Ívtechnikai Kft.
Infocommunication Center, SZTAKI, Hungarian Academy of Sciences
manno@sztaki.hu

Zoltán Juhász

Contour analysis of different European and Asian folksong corpora using self learning algorithms

A self learning computer system classifying melody contours of 15 different folksong corpora in Eurasia is shown in the paper. The pitch level variation in the melodies is described by multidimensional melody vectors, and the classes of similar melody contours in a given data base are determined automatically, using a special kind of a widely used artificial intelligence, the “self organizing map”. The system has been developed specifically for folksong analysis. A further, cross-cultural comparison of the similar melody classes in the 15 different national cultures allows us to decide if the correlations shown by the results should be attributed to real cultural interactions or occasional events of an independent musical evolution. The results are illustrated by concrete melody examples having found with the aid of the computer system.

Research Institute for Technical Physics and Materials Science
Hungarian Academy of Sciences, Budapest
juhasz@mfa.kfki.hu

János Sipos

Using Artificial Intelligence for Comparative Musicology on Eurasian Folk Music – In the Wake of a Special Musical Structure

This paper gives some concrete examples on the application of a computer program developed by Zoltán Juhász in the comparative musicology.

From the beginning, there have been different currents in ethnomusicology. Though lately approaches concentrating more on the cultural and social aspects of the music gained the upper ground, we do have to remember that folk music is a special phenomenon having its own specific forms, evolutionary rules and basic forms.

In the paper we look for different realization of a concrete musical form, the so called fifth-shifting structure. With the aid of the computer program we trace this musical structure in the music of different people from China to Western Europe. We analyze and compare the significance and the specific features of the fifth-shifting melodies in different folk music as well.

The serious character of the analytical part of the presentation will be cheered up by sound and video recording I made in Turkey, in the Eurasian steppe and in the range of the Caucasian Mountains.

Department of Folk Music Research, Institute for Musicology
Hungarian Academy of Sciences, Budapest
sipos@zti.hu

Louis Peter Grijp

Diachronic Research in the Dutch Song Database

The Dutch Song Database (www.liederenbank.nl) contains over 125,000 entries for Dutch songs from the Middle Ages until the present time. Sources are handwritten and printed song books, emblem collections and other books, plays, broadsides, and field recordings. The database contains several advanced search options, using e.g. stanza forms and music. Especially this musical search option (currently being developed in the Music Information Retrieval project WITCHCRAFT) is a challenge both for ICT-researchers and musicologists, as many melodies are subject to oral variation. In the Database, special attention has been paid to contrafacta. In many historical songbooks only texts without music have been delivered, often with "tune indications" (a tune indication mentions to which tune a song text can be sung). In the Database, all song texts sung to the same tune have been linked as far as we were able to identify the melodies and the tune indications. On the other hand, field recordings rarely contain tune indications but there is nearly always music. Here an important problem is to identify and classify the recorded melodies, which may vary considerably.

As the Database combines historical and ethnological material it enables diachronic research. This implies we have to combine historical and ethnological methods. But can a concept like "melody norm", developed for the identification of melodies of contrafacta, often without notation and even sometimes only recognized by its stanza form, be applied to field recordings?

I will speak about these dilemmas using as examples songs which have been recorded in the 20th century but for which also medieval versions can be found in the Database.

Meertens Institute, Amsterdam
Utrecht University
Louis.Grijp@meertens.knaw.nl

István Pávai – András Mórocz

Complex Folklore Database Project

The folk music and folk dance collections of the Institute for Musicology and the House of Heritages are of the most significant ones in East Central Europe. Their archives preserve field recordings from Vikár and Bartók as well as contemporary private collectors from the entire Carpathian Basin. The material from various ethnics is processed and maintained with scientific methodology at both institutes.

We present a unique IT development approach, targeting multi-lingual, complex processing and web publication of this valuable folklore heritage.

Hungarian Heritage House
Folk Music Archives, Institute for Musicology
Hungarian Academy of Sciences, Budapest
pavai@zti.hu

Comm Laude Kft
andras.morocz@commlaude.hu



Contact

Folk Music Archives
Institute for Musicology
Hungarian Academy of Sciences
H-1014 Budapest, Táncsics Mihály utca 7.
Tel.: + 36 1 214 6770 Fax: +36 1 375 9282
www.zti.hu info@zti.hu

Pál Richter
Head of Department of Folk Music Archives
Institute for Musicology, Hungarian Academy of Sciences
richter@zti.hu