MUSICAL MEMORY OF THE WORLD – DATA INFRASTRUCTURE IN ETHNOMUSICOLOGICAL ARCHIVES

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ABSTRACT

Ethnomusicological archives build the musical memory of the world, covering the geographical and the historical aspects of music worldwide.

This article gives a brief description of the nature and the functionality of ethnomusicological archives. It reflects the current state of data infrastructure (policy and technology), addressing issues of access to archives' holdings, of online visibility of music collections and of interoperability between archives.

An outlook of a mutual involvement and a resulting influence at each others work between MIR community and ethnomusicological archives is given.

1. ETHNOMUSICOLOGICAL ARCHIVES

Research on non-Western music is underrepresented in MIR research today. One of the main reasons for it according to Downie [1] is that the music data is not available, incomplete or non-standard:

„*we do not yet have comprehensive recording sets of African tribal songs nor Inuit throat music* " [1], p. 303

It means that the MIR community has no access to the respective field recordings. These recordings exist[1] – but they are hidden in the archives.

Ethnomusicological archives build a systematic, well documented repository of music recordings, covering geographically all regions of the world, often up to a micro scale of a single village, and historically reaching in some cases as far back as the end of the 19th century. They are what is left of our musical memory, since many oral music traditions are fading away due to changing environments, languages and cultural influences[2].

Ethnomusicological archives hold recordings on all different kinds of media: wax cylinders, all kinds of gramophone records, tapes, minidisks, compact disks, and hard disk recordings. The media are sometimes in a bad condition and must be restored. The playback quality of rare early recordings is sometimes very poor. The media can be very sensitive to temperature and humidity, thus special conditions are needed to ensure their endurance. Multiplication and recovering strategies have been developed to guarantee the preservation of the content[3].

Trying to capture as much of the social context of music making as possible, ethnomusicological archives preserve beside the audio/video recordings of music, interviews and environments also photos, field notes, books and publications on music cultures, music instruments, cultural and domestic objects brought from field trips.

	Items	Hours (incl. commercial)	Original collections
Berlin Phonogram Archive	>150.000	18.000	>1.000
Library of Congress, Archive of Folk Culture		>100.000	>4.000
National Sound Archive (British Library), World and Traditional Music section	300.000		370
Archives for Traditional Music, Indiana University	128.550	>250.000	2.000

Table 1: Amount of recordings in leading ethnomusicological archives

Many archives are currently digitising their collections. The level of digitisation of audio data varies from 1% (National Sound Archive, London, original ethnomusicological collections) to 50% (Berlin Phonogram Archive). The amount of attached accompanying information (metadata) is still considerably lower then that.

In contrast to recordings of classical or popular music, recordings in ethnomusicological archives cannot be retrieved by composer name, because they are often traditional, or by performer name, because the performers are usually unknown to the searchers. The main criterion to search for an ethnomusicological recording is the cultural origin of the music. It also may be the geographic place where the recording was made, the language, the name of the collector, a social function or context (like a specific ritual), etc. Often the searches are performed combining several criteria [6] p54.

[1] See e.g. recordings by Jean-Jacques Nattiez for Inuit throat singing. There are numerous collections of recordings from different African cultures, see e.g. [2] p4 for Vienna Phonogram Archive

[2] for further discussion of the relevance of ethnomusicological archives today see [4]

[3] see IASA-TC-03 report of the International Association of Sound- and Audiovisual Archives

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2. DATA INFRASTRUCTURE – POLICY AND TECHNOLOGY

The implementation of physical as well as of online access to recordings and to metadata differs significantly between archives and countries. Restrictions are sometimes caused by the possessive attitude of some collectors and archivists. Another reason for restricted access can be a state policy (guarding the national heritage). If the archive is part of a large institution, general restrictive access policies of the institution are likely to affect the work of the archive.

Yet the main reason to restrict the access to the recordings in the archives is a complicated proprietary rights situation. The songs are often traditional (no composer), the performers living far away from the Western law space. The right to play and reproduce the recording usually remains by the collector. Unfortunately, field researchers are often reluctant to make their recordings accessible in general, without them being asked for permission for each use. In many cases the ownership is unknown (orphan works) or the owner cannot be located, which also restrains archives from making recordings accessible.[1]

Many archives catalogue their holdings electronically, but don't make their catalogues available online, the most prominent examples being Berlin Phonogram Archive and The Archive of Folk Culture of Library of Congress. Yet there have been some promising developments in the last years, see links [7]–[13] for existing or soon-to-come online catalogues.

The first networks of archives are being established currently [11]–[13], thus there is an urgent need to exchange, share and integrate metadata [6], p40. The diversity of archives, of types of archived objects and of archives' metadata structures makes that a great challenge. A certain amount of metadata standardisation becomes inevitable, though it is hard for the archives to admit and accept it. The Ethnographic Thesaurus project [14] might offer the foundation for a common thesaurus for ethnomusicological recordings.

3. MIR AND ETHNOMUSICOLOGICAL ARCHIVES

Mutual involvement would push the boundaries of both MIR research and the work of ethnomusicological archives. Analysis and retrieval of non-Western music recordings raises new MIR tasks: instead of searching for similarities, we might be more interested in detecting distinctive musical features specific to a music tradition or a given collection; instead of genre classification, which is meaningless across cultural borders, we might want to train classification engines to recognize cultural/geographical affiliation of recordings. Editorial metadata like cultural origin or social context is often essential for retrieval and is usually well documented in ethnomusicological collections. This may suggest its closer integration into MIR tools.

MIR could offer automated annotation tools to the archives: it would be useful to add information like song length, playing instruments, number and gender of singers, etc. automatically. MIR could also introduce new search strategies to the archives, involving both metadata and sound analysis.

Ethnomusicological archives could provide new test data sets for MIR algorithms containing difficult, non-common-practice music examples. Being public organizations devoted to collecting, maintaining and documenting musics of the world, they in fact should be our main partners in research issues.

[1] For further discussion of intellectual property rights and ethics for ethnomusicological recordings see e.g. [5]

4. REFERENCES

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[9] Archives for Traditional Music, Indiana University http://www.iucat.iu.edu/authenticate.cgi?status=remote&select1=WEBSERVER

[10] Alan Lomax Archive http://www.lomaxarchive.com/

[11] Smithsonian Global Sound http://www.smithsonianglobalsound.org/

[12] DISMARC www.dismarc.org

[13] ethnoArc http://www.ethnoarc.org/

[14] The Ethnographic Thesaurus project http://www.afsnet.org/thesaurus/