

PROJECT OF DIGITALIZATION IN THE INSTITUTE OF MUSICOLOGY
SEREBIAN ACADEMY OF SCIENCES AND ARTS, BELGRADE

The first to think, quite rightly and with foresight, that Serbia was in need of a phonograph for the purpose of making field recordings of national folk music was the great Serbian composer, folk tunes collector and the author of the first ethnomusicological study in Serbia published in 1902 (though at the end of 19th century some attempts in this direction were made by Tihomir Ostojić, 1865-1921), Stevan Stojanović Mokranjac (1856-1914). As an associate of the Ethnographic Board of the Royal Academy of Serbia, and someone highly experienced in collecting folk tunes, Mokranjac submitted a detailed proposal for the purchase of the phonograph to the Ethnographic Board. He was aware of unreliability of numerous transcriptions sent to the Academy by untrained laymen from villages and small towns around Serbia. Had there been a positive response to his proposal, Serbia would now be in possession of phonographic recordings of its national folk music from the very beginning of the 20th century. At the time he was the only musician in the Ethnographic Board of the Academy and unfortunately his proposal was not accepted.

The need for an archival centre for storing ethnomusicological material was recognised in the period between the two world wars. At that time the entire ethnomusicological work in Serbia was under the influence of the general development of global ethnomusicology, which had by then become a separate and wholly independent discipline, with the pronounced emphasise on the need for sound recordings. Prominent Serbian composers-melographers of that period (Miloje Milojević, Kosta Manojlović and Petar Konjović) were educated in Western Europe and their views were formed by these developments. Although they were aiming for artistic creative work and the use of national folklore elements in their pieces, the focus of their work and the end results show that they very well acquainted with the results of contemporary ethnomusicology. They made efforts to include their traditional music research in Serbia among humanities, and to elevate the material itself to the rank which it rightfully deserves in the culture of a

nation, and we would add, of the whole humanity. One of the first tasks they set themselves was very similar to what their great Hungarian contemporary, Béla Bartók had already done: to create an overview of the national, in this case Serbian, musical tradition in its relation to the neighbouring cultures, and to single out its specific characteristics that made it autochthonous. It was to that purpose that field work was conducted in the period between the two world wars.

The archival centre for sound recordings of folk tunes, modelled on similar institutions elsewhere in Europe, a small, but significant archival centre was founded by Kosta Manojlović (1890-1949) within the Ethnographic Museum in Belgrade, in 1923. The first field recordings made in Serbia by the Serbian ethnologist Borivoje Drobnjaković were phonographic recordings on wax plates. Kosta Manojlović continued his work and within 1930 and 1933 made a hundred and eighty plates contain 362 tunes, mostly recorded in Macedonia (at the time the part of Southern Serbia), and also from Kosovo and Metohija. His notes and published interpretations show he attempted both an ethnomusicological approach, and musicological analyses.

Wax plates with Manojlović's recordings are now kept in the Institute of Musicology of the Serbian Academy of Sciences and Arts (SASA), as a donation from the Ethnographic Museum. Institute possess 144 plates, of which 92 are in playable conditions. They are currently being restored and their content transferred into digital format. Since this technically complex work could not be done in Serbia, since the beginning of 2007, within the mutual project between Austrian and Serbian Academies of Sciences, Mr. Franz Lechleitner, consultant-engineer at the Phonogramm Archive (of the Austrian Academy of Sciences) in Vienna has made the report on the state of this collection.

The first centre of research in the field of Serbian musical history and ethnomusicology was the Institute of Musicology SASA, founded in 1948. The founder of the Institute, composer Petar Konjović, initiated the work of the Musical Folklore Department. The individual who initiated making field recordings one of primary tasks, was one of the joined fellows of the Institute, the first Serbian ethnomusicologist Miodrag Vasiljević (1903-1963). Associates first used wire recorders, then from 1957 magnetic tape on NAGRA and UHER tape recorders, followed by audio-cassettes using SONY

WMD 6-C cassette player during the 1990s, while nowadays recordings are done in the digital form, on mini-disc recorder SONY MD RH1.

The greatest contribution to the Institute's sound collection was made by ethnochoreologist Milica Ilijin (1910-1991), a disciple and follower of the Janković sisters, the pioneers of Serbian ethnochoreology, and the ethnomusicologist Radmila Petrović (1923-2003). Milica Ilijin worked as an associate of the Institute since its very foundation and was involved in the first sound recording projects. The first field recordings for the Institute's archive were made during the field research in Boka Kotorska, Montenegro, from 1951 to 1953, using a wire recorder. The same technique was employed in the research that followed over the course of the next four years, in various parts of Serbia. A total of 1124 recordings have been preserved. Milica Ilijin was particularly dedicated to the study of multiethnic rural and urban areas of Serbia – Vojvodina and Kosovo.

Throughout her fruitful fieldwork ethnomusicologist Radmila Petrović was observing musical folk culture through the interplay between music and the life and needs of the communities, following the American methodological approach which closely relates ethnomusicology and anthropology. She studied various segments of ritual, traditional and everyday village life from virtually all regions of Serbia. Along with the folklore of the Serbs, she also recorded Wallachian, Muslim and Albanian folklore. This research was continued by her successor, ethnomusicologist Ana Matović and is conducted to this day by younger associates at the Institute.

At the end of 2006, after a long period of preparation, the digitisation project was started, guided by enthusiasm and good organization, but also with precious pathways of archive researchers which had great experience in this activity. Like in the times before, but in other surroundings and conditions, a group of professionals, ethnomusicologists in the domains of applied ethnomusicology and musicology, guided by the knowledge of sound engineers and technicians created a detailed plan for execution of this important and demanding task – digitalisation and preservation of old recordings. It seems that today ethnomusicologists are dealing more with the restoration than with collecting as was the case in the past times. Although there are ethnomusicologists who are trying to collect the remnants of the music heritage, there is an increase of those research activities

which rely on recordings of the previous researchers. This is not absolutely illogical as it just follows from the needs and conditions of the society today. However as the technology has changed researchers needed new forms of sound carriers. Once again technology led us to change our own behaviour and man had to subject to the machine. For these reasons, and not just because of that, initially the emergences of such project grow and the Institute of Musicology, many years after related western institutions, followed the same path to get a solution.

The project *Catalogisation and Restoration of Phonographic Collection of the Institute of Musicology* was developed in several phases: 1. Software production (designated to obtain manipulation with details and other information of the recordings or metadata), 2. Digitisation of the recordings from the magneto phonic tapes 3. Recovery of the recordings on wax plates and wires, and 4. Digitisation of phonographic material recorded on magneto phonic tapes in the second half of the 20th century. Even though some of the tapes require repair and restoration, we can tell that most of the recordings are in a very good condition and that digitisation is proceeding on a regular basis. Since the project has started the number of the recordings that need digitisation has grown because the Institute of Musicology is the only institution that can handle emergencies and demands of the music collectors and collection owners. At this moment the Institute collection is dealing with sound manipulation in several directions:

1. Optimal signal retrieval from original carriers; digitisation and categorization of analogue material
2. conversion and manipulation of digital recordings

So far the Institute collection has covered over one third of the sound recordings that are digitalized and over 20% of the finalized material is ready for further manipulation and eventual publication.

Even though the Institute collection contains today over 600 magneto phonic tapes, 144 wax plate records and over 40 wires, we can assume that a number of recordings are missing so one of the goals is to return them to this collection. Some recordings which are kept in the archive have been inherited from different institutions such as the National Broadcasting Network RTS and individuals who had previously recorded music for their own needs. Some of that material includes recordings made

outside Serbia in Romania, Bulgaria, Greece, Iran, Turkey, the USA, Mexico and Japan. These recordings were obtained largely through international exchange, but in some cases they were received as gifts from enthusiasts who had made them in their native regions.

Technical details: The digitization of the recordings is realized with the usage of one magneto phone (Uher, SG 568 Royal) connected to the digital mixer (Yamaha, MG 10/2) with DIN connector (audio out), and single-conductor as audio in. The analogue-digital conversion is done in a real-time mode, and the signal is written in Sound Forge[®] software in which the recording is later edited. The signal is written as 44, 100Hz, 16 Bit, Stereo or Mono, PCM wave file and afterwards slight editing is applied, such as fade in and out effect not affecting the music which is recorded and normalization. In the process we are trying to obtain the same sound quality and to keep the authenticity of the real recording as is on the magnetophonic tape. The primary copies are ‘unattended’ so the manipulation is done only with the secondary copies. Sound interferences as scratches, noises etc. are kept without any ‘repairs’, as that make us aware of the importance of the ‘original’ recording and its meaning but it also provide us with the option to intervene from the starting point as the music is recorded in the first place. Secondly, metadata that follows the recordings, such as names of the performers, instruments, year of the recording and other information are entered in database that the Institute obtained from the National television RTS and which were constructed specifically for the needs of the sound recordings. We are however thinking of upgrading to some more commercial base features as i.e. Oracle[®] Multimedia (formerly Oracle[®] *interMedia*) in the future. Following the needs of every archive, the Institute of Musicology is trying to provide all necessary equipment and information in order to be able to deal with the acquisition, documentation, access and preservation of the material.

In the future, when the digitization process is finished we are planning to enhance and expand our network and to connect to the other related institution in Europe in order to integrate our sound collection with digital collections of manuscripts and photographic materials and to make it partially public. The real need is not only to try to keep the older recordings functional but to build the safe environment for keeping contemporary material as well.